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ABSTRACT

Following an introductory overview of the problems facing education in Colorado, 46 specific educational reforms recommended by the state governor's Task Force on Excellence in Education are discussed in this final report, and the state and local agencies that must be involved in the implementation of each of the reforms are identified. The recommendations fall into eight categories, the first three being (1) schools and schooling, comprising suggestions relating to the curriculum, student achievement, remedial education, school and class size, programs for the gifted and talented, time utilization, discipline, and English as a second language; (2) teaching, covering career development, financial support, teacher education, teaching materials, and recognition; and (3) administration, covering the qualifications and preparation of building administrators and the roles of the superintendent's office and the district school board. The remaining recommendations focus on (4) financial support and the state's financing system, (5) the role of higher education, (6) increased recognition of the diversity of students' cultural backgrounds, (7) cooperation between school and community, and (8) likely educational norms of the future. Minority reports, a 137-item bibliography, and a listing of task force members complete the report. (PGD)

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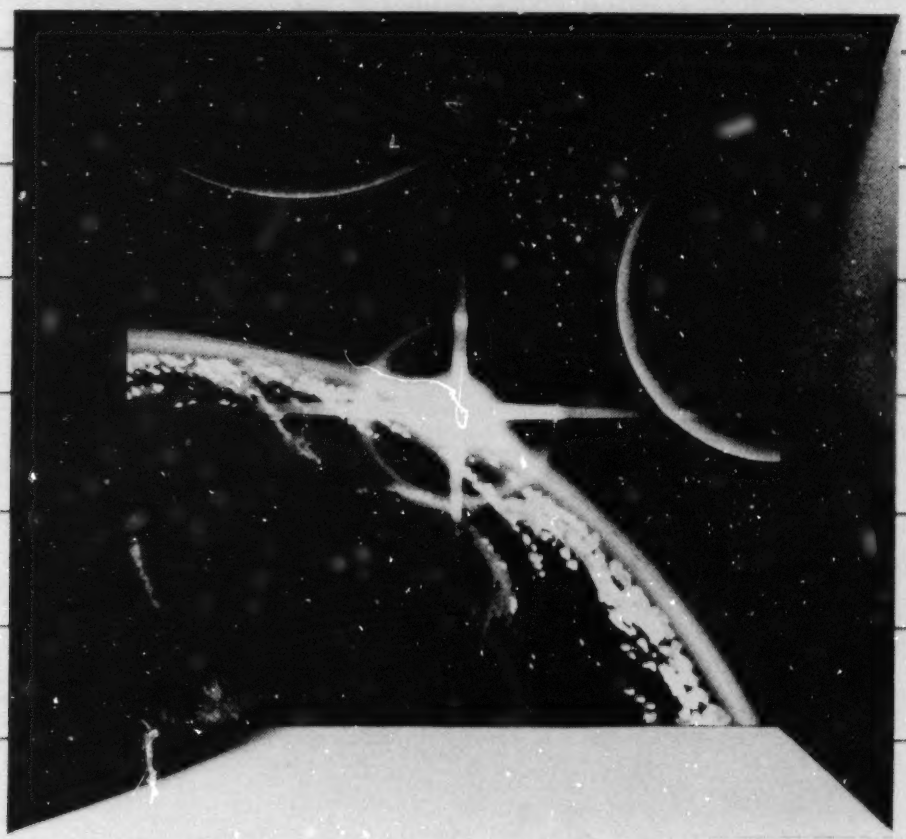

Final Report of the Task Force for Excellence in Education

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PREFACE

Education is the process through which the past communicates with the future. Our schools give form to that process. It is the task of our schools to appropriate the accumulated wisdom of previous generations, reinterpret it in light of contemporary history and apply it to current problems. In doing this, education creates the future. Education stimulates while adapting to change. At its best, it is in a state of perpetual creative tension -- between the past and the future, stability and change, continuity and innovation, inert structure and dynamic process.

Upon graduating from our schools, our children must be equipped to manage their lives as adults. New realities will confront them. They are growing up in a world vastly different from that in which their teachers, administrators and parents grew up. Theirs is a global village. In an information society characterized by resource scarcity and tragic trade-offs, they will nonetheless encounter infinite possibility. They will do and be many things in the course of a lifetime. The stimulating world which awaits our children will challenge them with countless complex decisions. To meet these challenges, they will need to possess the capacity for critical thought in addition to the basic skills and knowledge we have traditionally passed on in our schools. We cannot, like the generals who continue to fight the last war, continue to teach the last generation. As history marches relentlessly forward the institutions by which we sustain and improve civilization cannot rest. We cannot rest. To stand still is to deteriorate.

Education is an inheritance not to be squandered, but to be invested and renewed. There are, unfortunately, many obstacles which currently impede our progress. The mission and the financing of our schools are at the center of intense controversy. Meanwhile, the numbers of parents and school age children are dwindling. Our schools are perceived as institutions separate from the rest of the community, and our teachers are not recognized for their true worth to society. This state of affairs dangerously clouds the fact that we are all the beneficiaries of our public schools, that we are, in fact, vitally dependent on them. Thus, it is difficult to forge a consensus on appropriate action to be taken and, more importantly, to build a broad base of active support for that plan.

This report, the product of many minds and many hours, represents such a consensus. We would like to take this opportunity to acknowledge with gratitude the genuine concern and diligence of the Task Force members. We would also like to recognize that our schools have done a remarkable job in the face of tremendously accelerated social change. The time has come, however, to modify the system, to provide stronger support if they are to carry out their mission. Now, the challenge before us is to enlist the support necessary to act on the recommendations presented herein.

The continued growth of a democracy, its capacity to create and adapt to historical change, absolutely requires that its members be educated. The political and economic future of the United States, of Colorado, is inextricably linked to the future of education. All of us - parents, students, teachers, administrators, local officials, state legislators, business leaders, and community members - must take responsibility for the reformation and resurgence of our schools. Our children must be interested, informed, disciplined and qualified adults. This is not a priority. It is a moral and social imperative.

Governor Richard D. Lamm
Co-Chairman

John Fuhr
Co-Chairman

INTRODUCTION

The Task Force for Excellence in Education first met on August 29, 1983. Task Force members set for themselves the following tasks:

First, to draw a vision of better education in Colorado, and to establish goals for the total system of public education.

Second, to reemphasize the need for an education system that will prepare students for the 21st century, in light of Colorado's special opportunities.

The goal of this report is to set in motion a process which will produce in the State of Colorado the best system of education in this nation. To achieve that goal we have sought to present a set of agenda items, short-term and long-term, to the General Assembly; the State Board of Education; district school boards; administrators; teachers, parents and students; business and industry; and higher education. We are aware that change cannot happen overnight, but are determined to see that the process begin.

The Task Force began its deliberations in the midst of wide-spread dissatisfaction with the performance of public schools. A variety of national polls had dramatized this concern. Various national task forces and numerous private studies had concluded that public education no longer was meeting America's needs. Those reports questioned the ability of the existing system to produce individuals capable of functioning in an increasingly technological and scientific world, and of keeping America economically competitive worldwide.

These concerns have been reflected in Colorado. Although evidence on hand indicates that Colorado remains well above average in the nation, members of this Task Force believe that being above average is not good enough. We are concerned, first of all, that the education system does not focus sufficiently on those students who are not college bound directly after high school. At present, some 60 percent do not take ACT or other tests, making a general conclusion about their level of accomplishment difficult. We also are concerned that 24 percent of all students who enter high school do not graduate. We do not believe that a state that ranks eighth in the nation in per capita income, and at the very top of the nation in the average number of years of education in the adult population, should be 30th in pupil/teacher ratio, 22nd in percentage of high school dropouts, 26th in expenditure per capita on education, 17th in average salaries for teachers, and 15th in expenditures per pupil. Our students deserve the best.

In approaching our task we have made the following assumptions:

- The public schools are, and will remain, the mainstay of education in Colorado.
- Education reform in Colorado builds on a foundation of schools which have served the state well in the past, but which will not serve in the future without improvement and adaptation to social and economic changes.
- Reform cannot be thrust on schools. Policies can be enacted which encourage and promote change, which support and reward risk-taking and innovation, but reform will take place only with the full accord and participation of teachers, administrators, students and parents. Independence and diversity are to be encouraged, not just tolerated for legal reasons.
- Quality and equality are inseparable, not mutually exclusive. Every child can learn. Ability and achievement can never be equal, but opportunity can and must be equal.
- Schooling is affected by social, economic and cultural changes, and in turn has substantial influence on developments on the economy and the society. Schools can have an impact on unemployment and crime rates, just as schools also may be handicapped by changes in family or community institutions.
- Individuality, diversity, creativity and innovation are essential aspects of the American character, and can be fostered in schools only if students are treated as individuals.
- Excellent education is essential to technological innovation and to the ability of this state and this nation and to compete economically in the future.

It would be impossible to identify goals for public education without first defining schooling and education. For the purposes of this effort the following definition is offered:

Education is a lifelong process by which individuals gain knowledge about themselves, about the society in which they live, about their physical environment, and about their past and their future. Schooling is the formal process established by every society to impart knowledge.

Schooling must teach a set of basic skills, it must impart the broadest possible body of essential knowledge, and it must help students integrate knowledge and skills in order to think critically. Basic skills include, but are not limited to, the ability to communicate orally or in writing, the ability to understand and utilize mathematics, and the ability to acquire information. Knowledge must include a thorough grounding in the physical sciences and scientific methods; in the physical and psychological makeup of the human being; in history and the social sciences; and in the humanities and the fine arts. Schools should teach, but not advocate, society's values in a manner which allows free and informed choice. Critical thinking includes the ability to think logically and objectively, and the ability to make decisions.

The product of public schooling--the high school graduate--should be an individual whose breadth of knowledge and perspective combine with basic skills and suppleness of mind to prepare him or her for a lifetime of learning in an ever-changing world. Graduates who do not choose to continue into higher

education will be prepared for a meaningful entry into gainful employment or for further, job related training. Graduates will be well prepared to contribute productively to our increasingly complex and technological economy and thus will repay valuable dividends for the educational investment in the student. Those individuals also will be prepared to become responsible citizens of the democracy in which we live.

Based on this definition of education, and with the assumptions stated, the Task Force has come to the conclusion that a number of positive changes can be made in Colorado's school system, which will begin our progress toward a system which is second to none. It is imperative that our recommendations be seen as integral parts of a complete package. Education in Colorado, however imperfect, is a system--as John Goodlad has said, it is a "human system." To take up only parts of these interrelated recommendations, to pursue some, but not all, would be to push the system into imbalance--to produce worse education, not better.

Reform has been, in fact, a periodic feature of American education. The last such wave was the post-Sputnik era with its emphasis on science and mathematics. This Task Force has attempted to avoid the quick-fix, band-aid solutions. We urge the General Assembly to consider these recommendations in that light. We urge that current legislation be measured by these same criteria, and that, inasmuch as possible, legislation be part of the consistent whole presented in this report. We urge every element of the system to consider these recommendations not just as they affect the organization or group, but as they affect education as a whole.

Many of the recommendations in this Report are relatively cost-free. Curriculum review and better use of existing time in the school will not cost the taxpayer. Nevertheless, a truly excellent system will require the development and promotion of truly excellent educators. Quality teachers and administrators can be neither recruited nor retained unless the state is willing to pay them a competitive salary, and provide for continuous upgrading of their skills. Yet, more alone will not be better. Too often administrators today talk about numbers of students in class, rather than about the quality of education offered. Reform and excellence require risk taking. School finance can be directed in ways that will reward risk takers. Money must be available to promote and encourage excellence. A complete review of current methods of financing education is in order.

Changes must begin with a substantial improvement in the administration of our schools--with improved selection, training and evaluation of administrators--and proceed simultaneously with improved teaching and with improvements in the conditions of teaching. A career ladder for teachers, however desirable, cannot be successful if administrators and other teachers do not receive training in the evaluation necessary to determine which teachers should be promoted, which asked to improve, and which terminated. The Task Force recognizes that many of the recommendations made in this Report can be implemented on a short term basis while others may evolve over a longer period of time.

Most Task Forces such as this one, faced with an enormous body of factual material and many subjective opinions, tend to overlook one crucial element in education: the student. The sophistication, the knowledge and the level of awareness of today's student are often a quantum jump beyond that of the members of this Task Force when they were students. Students need to be encouraged to accept more responsibility for their own success in education and for planning their own futures. We urge all concerned, school administrators, teachers and legislators, to remember that students are deserving of our trust. They need to be involved in our deliberations, just as they are the uppermost part of our concerns.

This Task Force would be remiss if it failed to mention that many sound initiatives for improvement already are underway around the state. Many of the ideas described herein already are being tried. The teachers, the principals, the superintendents, the parents, the communities and the students where these activities are underway deserve our fullest congratulations and support. However, this Task Force cannot be satisfied with knowing that efforts have begun, or that pockets of excellence exist. Our goal is large: a system of education for the 21st Century which will provide real excellence in education -- a system which will challenge each student to achieve to the fullest of that student's ability. To those who have already begun this task we urge continued diligence and unremitting effort. To those others who have not yet begun, we ask immediate action.

A remarkable degree of consensus was achieved during the deliberations of the Task Force. Not every point received unanimous support, but each issue was discussed and debated at great length and in great detail. After debate, matters which did not gain consensus were decided by majority vote. Each Task Force member was asked to present motions for amendment of the final draft, in writing, before the March 15 Task Force meeting. Those Task Force members who did not agree with specific recommendations or specific sections of the report were encouraged to submit minority reports. Those reports are presented in Section IX.

Recommended Action and Affected Agencies

Agencies addressed in this report: State Board of Education (SBOE); Colorado Association of School Boards (CASB); Colorado Department of Education (CDE); Colorado Commission on Higher Education (CCHE); State Board of Community Colleges and Occupational Education (SBCCOE); Colorado Association of School Executives (CASE); General Assembly.

I. SCHOOLS AND SCHOOLING

A. Curriculum

1. Review boards should be set up in every school district and in every school to redefine course content and re-evaluate course offerings and requirements. These activities should be ongoing. Review of course work should include the needs of the non-college bound.

   Action required by: CDE, SBOE, SBCCOE, individual districts, individual schools.

2. Vocational education is valuable to many students, the Task Force recommends the development of viable programs to meet the needs of this large population of students.

   Action required by: CDE, SBCCOE.

B. Measurement and Accomplishments

1. The CDE should take the lead in setting guidelines for testing achievement. The department should ask all school districts to test students at specified ages, and specified times of year, and should indicate a range of acceptable tests. Schools must test critical thinking skills. All districts must take steps to assure that promotion is based on acceptable achievement, not on social considerations. Accomplishment guidelines should be set out by the SBOE to stimulate curriculum reform.

   Action required by: CDE, SBOE, SBCCOE, school districts.

2. School districts should strive for individualized, "prescriptive" education for each student in the system. This is very important for the gifted and talented, and for those who may be categorized as slow or handicapped learners.

   Action required by: school districts.

C. Remedial

Short-term remedial programs should be instituted for those students already in or about to enter high school who may be handicapped by the introduction of new, more rigorous graduation and promotion requirements.

Action required by: school districts.

D. School and Class Size

1. School districts should strive to reduce class size to no more than 15 students per teacher in grades K through 4. Schools should set class size at other ages by course content, and required student/teacher interaction, but not by an arbitrary formula.

   Action required by: SBOE, General Assembly, school districts.

2. The SBOE should commission a study of optimum school size and possible divisions within large schools.

   Action required by: CDE, SBCCOE.

E. Gifted and Talented

Challenging education must be offered to the gifted and talented. A full-time position of state coordinator/advocate should be created and supported by seven regional resource teachers. The state should develop guidelines for gifted and talented programs.

Actions required by. SBOE, CDE, SBCCOE.

F. Time

1. The school system should improve its use of time now available before attempting to increase school day or year. The CDE should undertake a study of optimum school time, including potential costs.

   Action required by: school districts, individual schools, CDE.

2. Homework is a necessary addition to every student's learning time, but should be assigned according to course content; it should not be arbitrary, nor should it be disciplinary.

   Action required by: school districts, individual schools.

3. Extracurricular activities which detract from the school and study time of students should be discouraged. Athletic programs, other extracurricular absenses, and student employment should be examined carefully by each school district, and clear guidelines set down. The State Board of Education should provide advisory guidelines to promote statewide consistency. The legislature should clarify the requirement of 180 school days, and 1080 teacher/student contact hours, and insist that schools provide make-up days for days missed due to weather, teacher meetings, pep rallies, and so on.

   Action required by: SBOE, school districts, SBCCOE.

G. Discipline

Discipline is not a serious problem in most Colorado schools. However, procedures can be streamlined and improved; administrators can give more support to the efforts of teachers in the classroom, and teachers can be taught to improve their ability to exert positive discipline throughout the schooling experience. Students and parents can be brought more into the discipline process.

Action required by: General Assembly; district school boards; individual schools; teachers, students and parents.

H. English as a Second Language

The Task Force endorses the recommendations that students under the English Language Proficiency Act be eligible for three years of funding, rather than two, as is now the case.

Action required by: General Assembly

II. TEACHING

Teaching should be transformed into a profession of excellence via effective career development.

A. A state-wide effort is needed to find the resources necessary to remunerate teachers at rates which will ensure that teachers of high quality can be recruited and retained.

Action required by: General Assembly, school districts.

B. The state should assist school districts to set up effective, fair, and objective performance evaluation. Evaluation should focus on improving the quality of teaching–unsatisfactory performance should result in separation in a manner fair to every teacher. The Teacher Tenure Act can be replaced by a fair and effective system of evaluation. Such a system must include teachers in the evaluation process.

Action required by: CDE, school districts.

C. The state should encourage school districts to create pilot projects for career ladder or other career development programs.

Action required by: General Assembly, CDE.

D. Preparation of teachers must improve.

1. Scholarships and loans which could be written off in return for successful teaching should be made available for potential teachers.

Action required by: General Assembly, higher education.

2. Colleges and universities should demand higher standards for admittance to teacher training, such as standardized tests, minimum grade point performance, and successful completion of a two-year liberal arts program, and should require that each student major in a particular subject, in addition to education.

Action required by: higher education, CCHE, CDE, SBCCOE.

3. Colleges and universities, in cooperation with CDE, should drastically improve, and probably pare down, current education courses.

Action required by: higher education, CCHE, CDE, SBCCOE.

4. CDE should reexamine certification requirements. Teacher candidates should be required to pass a variety of tests at the college and state level before being certified. Certification itself should be made more flexible in order to allow those outside education to enter the profession after finishing their formal education.

Action required by: CCHE, CDE, SBCCOE.

5. The state should finance on-going research into effective teaching.

Action required by: General Assembly, CCHE.

E. Additional Requirements

1. Improve in-service training programs – state assistance with cost.

Action required by: CDE, school districts, CCHE, higher education, SBCCOE.

2. Careful evaluation of class and school size.

Action required by: CDE.

3. Additional preparation time for teachers – lengthen contract year by one to two weeks. Funding required.

Action required by: General Assembly, school districts.

4. Better textbooks, visual aids, computer facilities and other teaching material.

Action required by: school districts, CDE.

5. Improved recognition of outstanding teachers via a statewide system of awards.

Action required by: CDE, General Assembly, Governor, SBCCOE.

III. ADMINISTRATION

A. Principals/Principal Teachers.

With state guidelines, the following steps should be taken to ensure that every school in the state is headed by a strong instructional leader.

1. **Clarification of Task.** Each district must redefine the job of principal. Good management is necessary, but instructional leadership should be the primary responsibility of each principal. Every district should develop accurate, detailed job descriptions with clear understanding as to goals and expectations. The State should provide guidance and assistance.

   Action required by: school districts, CDE.

2. **Evaluation.** Each District should develop effective evaluation systems with state guidance.

   Action required by: school districts, CDE.

3. **Selection.** The state should take the lead, via the certification process, in achieving more rigorous selection of candidates for administrative positions. Selection must focus on those qualities identifiable in effective principals.

   Action required by: CDE, higher education, school districts.

4. **Training/Preparation.** A drastic overhaul of existing programs leading to a master's degree in educational administration should begin. An academy of administration should be created from existing faculties to teach school management skills relevant to the needs of principals and other administrators.

   Action required by: CDE, General Assembly, CCHE.

5. **Retraining/In-Service Training.** Principals should receive regular in-service training. Training should focus carefully on the skills identified by research, and set out in this report, which are needed by effective principals. Regional academies of administration could provide necessary specificity to training programs.

   Actions required by: school districts, CDE, CCHE, SBCCOE.

6. **Recertification.** Type D Certificate holders should be subject to periodic review and re-certification. The recertification should depend upon relevant and effective performance evaluation. The CDE should make review of the performance of principals a part of the state accreditation process.

   Action required by: CDE, school districts.

B. Superintendents and School Boards

1. The state should initiate an advisory management study of the administration of education in Colorado. This study should examine central administrative requirements, necessary staffing, job descriptions of superintendents, and methods of evaluating and recruiting superintendents.

   Action required by: SBOE, General Assembly.

2. School board officials are key to excellent education in Colorado. The State Department of Education and the State Board should expand training courses offered to board members on school finance, teacher evaluation, and similar subjects.

   Action required by: CDE, SBOE.

IV. FINANCE

A. Spending too little in education will only end up costing the state more in other areas such as unemployment, welfare, and crime. Support for public education should continue to be the state's number one priority. State support as a share of total money spent on education should increase.

Action required by: General Assembly.

B. The General Assembly and the Governor should jointly appoint a task force to appraise the existing system of school finance in Colorado and make recommendations for improvement, or for a new system, before the 1985 legislative session. Although this report sets out a number of basic principles which should guide any such evaluation, the key to any finance system should be the degree to which it promotes quality. A system which simply provides money based on number of students attending class will not promote the system we hope to see in Colorado.

Action required by: General Assembly, Governor.

V. HIGHER EDUCATION

A. Four-year colleges and universities should increase standards of admission as an incentive to high schools to increase graduation standards. Admission to teacher training also should be more restrictive.

Action required: CCHE, higher education.

B. Institutions of higher education must improve training. Schools of education require thorough examination and review of curricula and staff.

Action required by: CDE, colleges, and universities.

C. Colleges and universities should develop closer relationships with public schools.

Action required by: individual institutions.

VI. FAMILY, CULTURE AND COMMUNITY

A. Teachers must be better prepared to cope with children who face new and conflicting familial and social relationships.

Action required by: CDE, school districts, individual teachers, higher education.

B. New means must be found to bring community and schools closer together – parents must be brought back into the schools. Schools must make every effort to involve a wide variety of community groups, including retired persons, in the schools.

Action required by: CDE, school districts, individual schools, SBCCOE.

C. The state must support and promote community education.

Action required by: CDE, General Assembly, SBOE, SBCCOE.

D. Colorado's schools should teach pride in ethnic and racial diversity. Leaders of minority communities should continue to promote excellence in education as the key to the advancement of any group or community.

Action required by: individual schools and teachers, minority leaders.

VII. COOPERATION BETWEEN SCHOOLS AND THE COMMUNITY

In order to promote cooperation between schools and businesses, and between schools and other organizations or institutions, the Governor should appoint a state office to coordinate, facilitate, promote and publicize such efforts.

Action required by: Governor, General Assembly.

VIII. SCHOOL OF THE FUTURE

A. Among items which should be considered for the future are: beginning school at age 4; ending required public school attendance at age 16; school size; diversity in teaching experiences; practical school experience for students; creative use of computers to promote not diminish pupil/teacher interaction; effective "futures" planning in each school district and each school.

Action required by: CDE, SBOE, school districts.

B. The Governor and the General Assembly jointly should appoint a long range planning committee to make recommendations to lead Colorado schools effectively and creatively into the 21st century.

Action required by: Governor, General Assembly.

A. CURRICULUM REFORM

Background:

Colleges, employers and parents alike are convinced that high school graduates have inferior preparation in basic skills such as writing, reading, mathematics, oral expression and problem solving. This definition of basic skills is an expansion of the traditional "reading, writing, and arithmetic." The broader definition is responsive to criticism that by defining basic skills too narrowly we have neglected to develop in our students the so-called "higher order" skills. The findings of the National Assessment of Educational Process appear to validate the legitimacy of these concerns. A recent survey found that 60 to 70 percent of Colorado employers said entry level employees had difficulty with most of the necessary writing tasks. Those interviewed said that only 60 percent of young workers were effective in handling basic calculations, and even more had difficulty with calculations involving such concepts as decimals, fractions and percentages. Colorado students continue to exceed national averages on SAT, ACT and other tests; however, Colorado and national scores have declined steadily for nearly a decade. At present, the largest 18 school districts in Colorado all require three and one-half years of English; they require **on average** almost three years of social studies/history/government; less than two years of math and less than two years of science. These are **averages**. Many school districts require much less for graduation. In fact, according to the Colorado Department of Education (CDE), schools throughout the state vary from zero to four years in requirements for math, science and social studies. The minimum for English is two years. Some high schools in the state offer more than 500 different courses. Many in the Denver area offer more than 400.

The definition of education as set forth in the Introduction above is a broad statement of the goals of public education in Colorado. The statement can be refined, and made more specific, by the State Board of Education. That definition also provides the first step in answering the question: what should be taught? The "basic" goal of education is to produce high school graduates with the competence to achieve their life and career goals. The **emphasis** of this thrust must be on **accomplishment** and **quality**. It must not be on quantity -- or a given number of years or a minimum amount of time spent on different subjects. If "back to basics" means simply more students spending more years in certain courses, mandated from outside the system, then the return to basics may very well be a step backwards for Colorado.

This Task Force is deepy concerned that many efforts at education reform tend to overlook those students not bound for college. Some 63 percent of our high school graduates proceed directly to work and/or to raise families after graduation. Sixty-one percent take no ACT test or other test by which their achievements can be measured in a standardized way. These students too often may be shunted into programs in which teaching is less effective and the curriculum and graduation requirements less than challenging.

Colorado's population is highly mobile. Each individual will change jobs several times in a lifetime. Vocational education must contribute to each individual's ability to learn throughout a lifetime. One of the goals of education is to develop students' capability to continue to learn in both formal and informal settings. Evidence from recent research on Colorado school districts indicates that at grades 5 and 6 our students rank at the 86th percentile in reading and the 82nd percentile in math. In grades 11 and 12, the student average was at the 68th percentile in both reading and mathematics. Information on other subject areas is not available, but these data on reading and math would appear to indicate the need for a stronger emphasis on an academic core at the junior and senior high school level. The data also reflect the need to study the emotional experiences related to the passages from elementary school to junior high or middle school and then on to high school. Good counseling is crucial to successful transformation from school to school.

Recommended Action:

As the nation and the world move ever-more rapidly away from an industrial society and into an information society, "basic skills" and the way they are taught are changing. However, certain constants will remain. For example, although ability will vary, every individual must receive a full measure of instruction aimed at developing and refining the ability to reason. It is these constants which must be emphasized as the real basics of education. With these constants each graduate of our public schools will be able to adapt to future changes. We must redefine the "basic core" of education and move ahead, not backward. The following are the Task Force recommendations for a basic curriculum content that should be required of every student.

1.) Communications

We believe each student must be able to communicate effectively. Students must be able to write clearly, must be able to comprehend the written language, must be able to express themselves clearly orally, and must be challenged to understand non-verbal communications, as well. The study of the English language and its literature are essential to every student.

2.) Social Sciences

Each student requires a deep and abiding knowledge of this country's political system, of world history, and of the way the student relates to society. Students should understand the basics of the economy in which they will play a role, and be aware of their country's relationship to the world economy. In short, the schools must impart to students the basic knowledge of the social studies without which they cannot become responsible citizens

The Task Force commends efforts to increase the teaching of foreign language in Colorado's schools, and recommends that elective courses be offered

whenever possible. Although two years of a language in high school is better than nothing, in order to be really effective, languages should be introduced before middle school, and continued through secondary education. It might be much wiser to provide a few students with nine years of effective study than to give many students only two years of exposure. Languages are not normally taught as a social science, but they contribute greatly to an understanding of the world.

Although all subject areas should relate to the world in which children and young people find themselves, the social sciences are particularly suited to help reduce the alienation which many feel from our institutions. In order to help all students meet their civil and social obligations, we agree with the Carnegie Commission that all high school students should complete a service requirement that would involve them in volunteer work in the community or at school. This new "Carnegie Unit" would be a requirement for high school graduation.

3.) Technical/Scientific

Each student also must be exposed to the maximum of her ability to technical/scientific studies. This field should include:

a.) Mathematics. Each student should study math to the limits of her ability and interest. Mathematics can and should be related to the student's real world in a way that will demonstrate its relevance.

b.) Science. The student must also have a reasonable exposure to the sciences. Our students must have a knowledge of the kinds of questions science can answer and those it cannot. All students need not receive detailed knowledge of science as a skill, they can however, be led to understand the nature of the physical laws of the universe, what they are and what they are not, and in what sense they are true.

Students must be shown that science is not a collection of isolated facts, but a highly unified and consistent view of the world. They need to understand how reliable conclusions can be drawn from general scientific laws, and how hypotheses can be tested. Students also need some grounding in the laws of probability and chance, circumstance and coincidence. These concepts can and must be taught to every student, whether that individual will graduate to an immediate job or continue on to college -- whether that student will pursue a career in the arts or will become a nuclear physicist. Graduates of our schools will be able to bring informed judgment to questions connected to science and technology -- questions which will be more a part of our daily life in the immediate future -- only if all are given equal access to these concepts. Moreover, these concepts must be presented in combination with sufficient exposure to the details of recent discoveries in physics, biochemistry, data processing, etc., to give them immediacy and relevance. The first step in this process is an immediate reevaluation of the science and math curricula and an attempt to update the "new" science curricula of the late 1950s and early 1960s. (With acknowledgment to David S. Saxon, President of the University of California, Berkeley, in the AAAS journal, *Science*, November 26, 1982.)

c.) Work. All students require guidance and counseling, including interest and ability testing, which will give them an understanding of themselves. This, plus a study of career options will help them to select training, classes and alternative experiences. They will be able to project ideas for their own lives after high school with confidence. For some, this process will require more detailed vocational courses. Strategically planned vocational education programs should offer practical, relevant education in fields of employment that do not require baccalaureate degrees, but that do demand competence. Vocational education can, in addition to the common core which all students must achieve, introduce students to the world of work and facilitate their transfer from the role of student to that of worker. The student not planning to procede immediately to college has a right to expect that technical **and** academic studies will be relevant to occupations which can be entered directly after high school. Academic courses must draw heavily on vocational subjects for reading matter and practical applications.

Because we are concerned that the education system does not focus sufficiently on those students who are not college bound directly after high school and because members of the Task Force recognize the value of vocational education to many of these student, the Task Force strongly recommends that the State Board of Community Colleges and Occupational Education (SBCCOE) work closely with the Colorado Department of Education in developing viable programs to meet the needs of this large student population.

d.) Computers. The Task Force recognizes the emerging importance of technological innovation to education, to business, and to everyday life. It is essential for students to become familiar with computers, as a curriculum subject in its own right, and computers must increasingly take their place as

instructional tools in a variety of curriculum areas. Schools should place a high priority on developing plans for the purchase and effective utilization of computers.

4.) Arts

Aesthetics is the very soul of our society. The performing and fine arts can enrich and enhance the lives of all students. Studies show that exposure to the arts leads to a significant improvement in the ability of students to comprehend and achieve success in other subjects more often labelled "basic."

5.) Survival Skills

Every student also must have a knowledge of how the human body works, and of how best to care for that body. Physical exercise is an essential ingredient to good health, and should be taught effectively to every student capable of participating. Knowledge of nutrition, stress, the effects of alcohol and tobacco, and the impact of the environment on the individual are essential. Investment in good health will provide ever-increasing returns, for studies have shown that health can be improved more efficiently and more effectively through good health practices than through expensive, curative medicine.

The rising increase of unwanted pregnancies, abortions, drug and alcohol abuse, and suicide among teenagers indicates that many do not have the knowledge or coping skills they need to succeed, or even to survive. While schools cannot, by themselves, correct pervasive underlying social problems, they can provide counseling and instruction of a preventive nature. The increasing number of one parent families indicates an increasing need for students of both sexes to learn the fundamentals of home economics, the handling of tools, and other life skills. Schools, then, have a continuing responsibility to help young people (as they traditionally have done in the past) to develop survival skills, without departing or deviating from their fundamental mission: to educate.

The areas of study outlined above have limited value if taught in isolation. Properly taught, however, the knowledge and skills learned are interdependent and can be mutually reinforcing. They should be taught in a continuous, integrated and articulated manner throughout the 12 years of public school. Every class, across the curriculum, should, for example, reinforce **good writing** skills. As the Council for Basic Education has noted, "newly acquired knowledge in one subject enlarges understanding of other subjects and provides an occasion for applying basic skills. Each skill is a medium for learning other skills and acquiring needed knowledge in the basic subjects. **The value of a good curriculum exceeds the sum of its parts.**" The Council adds, "no student should be free to choose an unsound curriculum, nor can a school responsibly offer one." The balance of required basic subjects and electives can vary, according to the student's mastery of the subjects, but electives should augment the basic subjects, not replace them, and "should equal or surpass them in rigor." A good curriculum will have unity, coherence and flexibility. Students are individuals who learn individually, at different rates, at different times, and usually best under different methods of instruction.

The above objectives require a thorough, comprehensive review by each school and by each school district, in Colorado, of courses now being offered. This review process must include a careful evaluation of those courses labelled as "basic," or offered as substitutes for the traditional basic courses, and of those courses now offered as electives. A basic core of courses **required for every student** should be set out by each district.

The next step in the review process is in-depth evaluation of the curriculum content of those courses retained (or added). As noted above, studies indicate that many schools today are not now teaching even the "new" science curricula adopted in 1962. Unless constantly updated, courses, especially technical courses, will not hold the interest of students. Curriculum planners also must remember that most students will not enter professions requiring a college degree.

The unenviable task of the planner is to construct course offerings which will challenge and reward all students. Some students will require in-depth, technical study of science to enable them to pursue scientific studies. Others will require only the knowledge of scientific methods necessary to understand what is happening around them. All must achieve a satisfactory level of understanding of the curriculum in each of the required subjects. At present, it is probably those students in "general" studies – those neither preparing for college nor involved in vocational study – who are most in need of improvement in course content and rigor.

Curriculum review must cross arbitrary divisions of age and grades. The substantive content of what is taught must be developed from the beginning, in kindergarten, and carried onward through graduation from high school. Ideas and subject matter should be introduced in carefully thought out sequence, and carefully coordinated between subjects. Moreover, much more can be done to facilitate the transition between elementary and junior high, between junior/middle school and high school, and between high school and the world of work or college.

It is absolutely essential that every participant in curriculum evaluation recognize that more is not necessarily better. It is the quality of understanding of a curriculum which is important, not the quantity of material covered. Curriculum improvement does not necessarily mean the addition of new material to any course – it might well mean a deletion of some material.

The Task Force recommends that each school district create a curriculum review board, or reexamine the mandate of existing boards. These boards should consist of equal numbers of teachers and administrators, and

include outside expertise. Parent and community involvement, especially employers, should be encouraged. Each school in the district should be represented on the curriculum review board. Although haste is to be avoided, much ground work has already been done, and these review boards should be able to provide effective input into planning before the 1984/85 school year. Review boards already are part of many accountability programs through the "local program review" accreditation requirement of the CDE.

In addition, every school district and school can benefit from a periodic audit of curricula by experts from **outside the system**. The Colorado Department of Education should be tasked with offering guidelines and providing professional assistance and leadership to those districts and schools whose size makes effective review difficult. The Department also should facilitate communication about effective review processes, and new subject matter, between school districts. State wide commissions have been making valuable recommendations on the various areas of the curriculum.

The CDE also should help all schools complete and send to parents audits of courses offered and courses selected. Such audits should be used to develop in-building and district-wide strategies for working with students and parents in an effort to combat the "take the easy subject" syndrome.

Curricula in Colorado need not be uniform. A monolithic education system is not the goal of this Task Force. However, greater compatibility and comparability are necessary if for no other reason than the extreme mobility of the modern family. No student should move to a new district (or another state) and be unprepared to cope with the basic curriculum being offered.

Achievement levels also need not be mandated. The very process of competition for jobs and for admission to college will ensure that school districts and local citizens will carry out their own enforcement of standards. Achievement of students in every school district inevitably will be compared with the guidelines established. Students from districts not meeting the minima for graduation will have more difficulty finding jobs, and more difficulty entering college. That kind of local self-enforcement is far preferable to mandates from the state.

This Task Force has placed great emphasis on the meaning of a high school diploma. It should be possible, however, to prepare a diploma which accurately reflects the actual record of accomplishment, of courses taken and test scores recorded, of each student. It is this "transcript" which has the most impact on admission to college, and the same should be true for most employment.

B. MEASUREMENT AND ACCOMPLISHMENT

Background:

Education and schooling are difficult subjects to measure. At present, no statewide requirements for standardized testing exists, and the various school systems give a multiplicity of tests at a variety of grade levels. In recent years students often have been promoted without regard for their level of achievement. No statewide guideline exists for accomplishment levels in the various fields of study offered.

Educators have documented the problems of standardized examinations: they may lead to testing of facts and memory rather than ability to think, teachers may teach for tests rather than for education, tests too often become maxima rather than minima, goals rather than tools. Across the nation SAT scores are more closely correlated to the percentage of student populating taking the examination than to any other single explanatory factor -- as the percent taking the test goes up, the scores go down. Tests must be used as learning devices and as diagnostic tools, not a labels and not for setting up categories or assigning "tracks." Too often tests measure only the skills needed for students proceeding to college.

Nevertheless, an acceptable way must be found to measure achievement. Measurement simply by time spent on a subject is unacceptable. A public which is being asked to spend money on education deserves to be given some concrete measurement of the results. Parents and potential employers must be assured that a diploma will be granted only to a student who has achieved an acceptable level of competence.

Testing under the National Assessment of Educational Progress in 1975 found that 12 percent of 17-year-old high school graduates were functional illiterates -- they were unable to read and compute at the sixth grade level.

Recommended Action:

Despite their drawbacks, standardized tests are a useful diagnostic tool and a reference point by which progress can be measured. Educators are agreed that statistical comparisons are possible even between different standardized tests. This Task Force recommends that the CDE take the following steps to regularize the testing process:

a) Testing should be required in every school district.
b) The CDE should specify the acceptable range of current standardized tests from which districts may choose.
c) The CDE should specify ages for testing and the time of year tests are to be administered.
d) Test results should be analyzed by the Department and published in a clear and unambiguous manner. Test results should be compared only when they represent like populations of test takers.

Testing must not be restricted to standardized testing. Testing of writing skills, of problem solving and of other critical skills are more important factors in the promotion of students. Tests must be directly related to curriculum taught.

Development of the curriculum review process described in Section I, A. will not happen overnight. In order to stimulate movement in the appropriate direction, the legislature should instruct the State Board of Education to publish advisory guidelines for high school graduation requirements. These guidelines should clearly be an interim step intended at stimulating reform. As soon as possible in the curriculum review process, the State Board should publish its guidelines for accomplishment in the various fields and in specific subjects within those fields.

This Task Force has noted that students are individuals who learn different subjects at different speeds and with different degrees of comprehension. Graduation requirements must not place school districts in a straight jacket. In constructing education requirements, the State Board should make clear that it is indicating minimum levels of **accomplishment**. Where students can achieve satisfactory competence in a subject in two years, rather than three or four, the school system should not erect barriers to early exit from high school. Rather, the State Board should cooperate with school districts to indicate levels of achievement which are acceptable, and permit flexibility in measurement of accomplishment. This requirement can be associated with additional testing requirements elsewhere in this report, so long as the perils of standardized testing are avoided.

This Task Force **strongly recommends** that social promotion of students be ended. Promotion must be based upon accomplishment within an established, integrated and articulated curriculum. This should not be taken as mandating the existing method of division by grades in perpetuity. Other and better methods clearly exist which recognize that students learn different subjects in different ways, and at different speeds, and that students can be grouped by achievement level, as well as age.

By law, special education programs are provided for students with IQ's of 69 and below, but special programs are not often provided for those with IQ's between 70 and 90. Yet, the inexorable dictate of statistics shows that the learning expectancy of that group is no more than the tenth grade level. **Some students must be below average**. The student with an IQ of 70 can be expected to reach only the high sixth grade level at age 17.

By the numbers, we are discussing approximately 20 percent of the total student population. The education system cannot simply abandon those students by setting minimum high school graduation requirements which the student cannot achieve. "If we consider the poverty, cultural deprivation, and the persistent sense of failure that grows from year to year as these children inevitably fall farther and farther behind children who have average and above-average ability, it may be that they and their teachers have been doing about as good a job as is possible for them to do." Our school system must provide for these slow learners, not abandon them. We must recognize that our goal of equal opportunity for all does not necessarily mean equal ability or equal accomplishment for all.

Some school systems will choose to set the slow learners aside into special programs. However, this Task Force believes that such separate tracks are largely unsuccessful. Expectations are set too low, and students in those tracks are often stigmatized as "stupid" and relegated to the status of "impossible." The problem can be best addressed only by creating truly individual instruction -- "prescriptive instruction" -- for all students. It is also clear that "retained" students require new techniques and probably some new course content if they are to be moved successfully onward in the system.

This is the means by which each student can be guaranteed the opportunity to achieve to the maximum of his or her capability.

"Prescriptive," individual education is an easy goal to set, but is highly difficult to attain. Such a system cannot be mandated by the state, it can only be developed by each school district. However, the State Board must consider these questions in setting graduation guidelines, and in preparing meaningful assistance to those school systems which may not now have the resources to begin prescriptive education immediately.

C. REMEDIAL EDUCATION

Background:

The addition of graduation requirements, and the renewed emphasis on basic curriculum, the creation of achievement standards, and elimination of social promotion will cause many problems. Not the least of these is that many students in high school today already are burdened by previous lack of emphasis on the basics. Unless a serious effort is made, many of those students faced with new and unexpected requirements may drop out of school

Recommended Action:

The state must be prepared to provide special assistance to those high school students who are unable to procede with the new requirements of high school study at an acceptable rate. High school graduation requirements should be phased in over a three year period, to avoid discriminatory treatment to students already in high school. Nevertheless, the thrust of the Colorado reform effort must be on upgrading achievement immediately. Remedial courses can and should concentrate primarily on reading, writing and mathematics. This Task Force recommends that those students entering high school in 1984 receive special attention. Those unable to complete remedial courses satisfactorily should be required to repeat the ninth grade. (Please note: the above section is intended as a short term program to help students already in high school or just preparing to enter.)

D. SCHOOL AND CLASS SIZE

Background:

There is considerable disparity among studies of optimum class size and not enough information on school size. The literature suggests that teaching becomes demonstrably more effective when class size is reduced to 15 students or fewer. Other studies indicate teachers of some subjects can be effective in classes or more than the 35 which often is considered the upward ceiling. Today, elementary teachers often must teach classes of 30-35, whereas secondary courses may have only 15 to 20 students.

Along most of the Front Range area (from Colorado Springs to Boulder) the average pupil/teacher ration in K-6 is 25:1, according to the Denver Area Schools Superintendent's Council. In one highly regarded district the ration reaches 27:1. Senior high school pupil/teacher ratios are, however, much lower. The average is 21:1 and the ratio in Denver is only 16:1.

Recommended Action:

The Task Force believes that reevaluation of advisable class size could be extremely beneficial. New relationships must be studied. In some cases, teacher/lecturers able to handle large numbers of students could be supplemented by tutors handling smaller tutorial classes of 10 to 15. Tutors also could be used in laboratory classes instead of the scarce and more valuable teacher/instructor time. Tutors might not have degrees in education. They might not even have college degrees.

The ages five to nine are critical in establishing a positive attitude toward education, and class size appears to play an even more significant role at those ages than later on. Every effort should be made over the next five years to reduce classes in K-4 to no more than 15 students throughout the state. The legislature should consider whether such a maximum number of students per teacher in the early grades could become a state criterion for funding, and should be prepared to provide the necessary funds.

Class size should be a function of subject matter. English, for example, is a subject which should require a large volume of written material -- material which must be graded and evaluated. One English teacher who teaches five classes per week will spend approximately 25 hours each week in class -- leaving only 15 hours of a 40-hour week for other chores. If that teacher has 35 students in each class, the remaining 15 hours divide up to a little more than five minutes per week per student for grading papers, counselling, and other personal interaction with the students. No time at all would be available for class planning, test preparation, keeping attendance, and the multitudinous paperwork that faces each teacher. In other words, an English teacher in this situation is literally being sentenced to work considerably more than 40 hours each week. Some truly outstanding teachers may be capable of managing such a workload year in and year out, but in order to achieve real excellence, the best step is to reduce the number of students in each class.

Schools (boards) must reevaluate their expectations of teachers. Teachers of subjects requiring demonstrably more interaction with students, especially those involving intimate knowledge of students and detailed criticism and correction of written work, should not be required to handle more students than can be managed effectively. As an example, many experts have suggested that 80 students total over a five hour day be a maximum for teachers of English.

Some evidence indicates that 750 may be a maximum effective number of pupils for any one high school, and no more than 400 for middle schools. Some existing school buildings could be divided up into co-existing "schools" or "houses" with differing emphases. One could focus more heavily on the arts, another on the sciences. All would be required to meet basic curriculum requirements. This Task Force recommends that the CDE create a professional task force to review the literature and make recommendations to the school districts regarding effective size. The Colorado Department of Education must take into consideration the impact new technology is already having on the delivery of information on technology techniques.

E. GIFTED AND TALENTED

Background:

It may well be that our education system fails most where it should do best -- with the gifted and talented youngsters in our education system. No state money is now spent on gifted and talented education, no state programs exist. Researchers tell us that gifted and talented children are 25 percent of the total dropouts in our state. In Arapahoe County, 16 percent of all delinquents who appear in court are gifted. In Denver, six percent of those identified as "hardcore" delinquents are gifted. Gifted and talented know no racial or ethnic division. The ratio of gifted and talented to the total population is the same for all.

Recommended Action:

The state must take its rightful place alongside the many private and philanthropic organizations attempting to provide challenging education for our gifted and talented students. Money should be appropriated to allow the CDE to provide a support base and an information network for a statewide program. The appropriation should provide for significant support. The Task Force recommends that a full-time position of state coordinator advocate be created, and that seven regional resource teachers be hired. The CDE should prepare state guidelines for gifted and talented programs, and should facilitate graduate and post-graduate teacher and counselor training in gifted and talented education. A working state standing committee with regional representation, including experts in the field of gifted and talented education, should be created.

The information network should provide resources for parents, children, and educators. The Rocky Mountain Clearinghouse for Gifted and Talented Education, and the Colorado Association for the Gifted and Talented

have experience and expertise to offer. The state should take advantage of their preliminary work.

F. TIME

Background

Many studies have demonstrated that American students spend less time in school than students of many other nations. Other studies have demonstrated that far too little time in a given school day actually is devoted to learning.

Recommended Action:

Much can be done to improve the quality of the time spent teaching. At this point the issue is not more time, but what is done with time now available. There is no clear evidence that an expansion of the school day or school year would increase learning. The Task Force recommends that the first effort in Colorado be aimed at improving the quality of time schools devote to learning and to applying recent time-on-task research. Administrators must be more aware tha. administrative notices and announcements can and should be made in a manner which does not interfere with class time, and effective, efficient schedules can be maintained. Non-instructional demand on teacher time must be minimized, and planning time increased.

1.) School year/day

Absences for extracurricular activities must be kept to an absolute minimum. The CDE should set up guidelines for school districts. Those guidelines should include a uniform maximum number of excused absences for each school year. The legislature should clarify the requirement of 180 school days, and 1080 teacher/student contact hours, as a minimum, and insist that schools provide make-up days for days missed due to weather, teacher meetings, pep rallies and so on.

In the longer term, the CDE should provide for an immediate professional assessment to determine the optimum school year and school day, and reconsider the prevalent September/June school year configuration. This study should include the likely impact on the quality of education, as well as costs involved.

It is vital to remember that extracurricular activities usually require participation by teachers. Such activities can remove teachers from the classroom a large number of days each year.

Clear guidelines should be set by the State Board for the number of days of absence permitted teachers to supervise extracurricular activities.

2.) Homework.

Specific recommendations on use of time in school and out. Available school time can be increased by maximizing learning time outside the school. The CDE should move immediately to investigate current practices in assigning homework around the state, and should set out guidelines for school districts. However, it should be clear throughout that homework is only an adjunct to teaching in school. Homework assignments must have significant content, they must be graded and evaluated carefully, and they must make a real contribution to learning. Homework must not be used as disciplinary pressure. The effect of such requirements on teacher time and pay must be included in any assessment. Homework requirements should not be restricted to high school, but should apply throughout the K-12 period. Actual minima and maxima cannot be legislated, but should be a part of curriculum development and depend on subject matter being taught.

3.) Athletics.

Members of this Task Force have received numerous complaints about the degree to which athletics detract from education in Colorado's public schools. As noted above, a variety of programs take students out of school for officially sanctioned purposes. Yet, nowhere in the system does more entrenched support for a non-academic program exist than for athletics. Parents and communities at large sometimes seem more interested in the ability of their football or baseball team than in the excellence of their educational establishment. In redefining the number of days and hours to be devoted to instructional time in each school year the General Assembly and the State Board of Education should pay particular attention to the question of athletics. Districts, and individual schools, will constantly be handicapped in their ability to take unilateral action by the fact their teams compete -- nor would this Task Force wish to underplay the value of competition. However, we must have a clear statewide policy which states unequivocally that the job of our public schools is education. Sports programs, just as other extracurricular activities, should enhance, not detract from education. As an adjunct to this program, the Department of Education should establish a dialogue with school principals, coaches, athletic directors, school boards, and the Colorado High School Activities Association to most effectively schedule athletic practices and contests.

This Task Force does not wish to single out athletics alone. Extracurricular activities make up an important contribution to the total education of a student. However, **all** extracurricular activities must be subject to the same conditions: **learning comes first!**

4.) Student Employment.

Teachers around the state have reported that students in high school are spending increasing amounts of time at jobs outside school. These jobs are offered as reasons homework could not be completed -- and often they even take up a part of the school day itself. This Task Force strongly favors work experiences for every student. Such experience

can provide positive reinforcement of work ethics, punctuality and loyalty to employers. However, such experience must not detract from the student's first job: learning. Parents must be made aware that the long-term education of a child is more important than short-term earnings. The State Board of Education should issue a statement clarifying the role of work in the high school. The Task Force recognizes that such policies limiting work could cause hardship to lower income families. In cases of demonstrated need, students should be encouraged to lessen their school workload in favor of delayed graduation -- graduation after five or six years of high school, instead of four, should be no stigma. Educational standards must not be lowered to allow employment.

G. DISCIPLINE

Background:

Research has shown that discipline is an essential part of the stable, orderly and demanding school environment which is in turn necessary for effective learning. There is also clear evidence that in those schools that pay serious attention to discipline and standards, "more pupils achieve at higher levels and leave school more satisfied, more productive, and more capable of contributing to both our nation's and their own growth." However, research also shows that discipline applied simply as control will not work in today's complex society. A constant emphasis on surveillance by the teacher for disciplinary infractions may produce more problems than it solves. (Wlodkowski, 1981, pg. 5-8.) The goal of discipline must be to establish an orderly environment that supports learning. Order, rather than control, is essential, and order comes from challenges and self-discipline, rather than through control. Discipline is helpful in the improvement of our schools only when it is part of a complete program for improvement.

Although discipline problems exist in Colorado schools, there is no evidence that such problems are widespread or should be cause for alarm. The legal authorization exists for effective discipline in schools. Teachers and administrators may hesitate at times because they fear possible court action and/or lengthy and time consuming paperwork and procedural questions if they take more serious disciplinary action. Lack of support for teachers from administrators can also be a deterrent. Schools often lack clear codes of discipline, or such codes are not communicated to students and parents. Yet, schools have been called "the third most autocratic institution in America -- behind prison and the military."

Recommended Action:

The State Legislature and State Board of Education should re-examine legal provisions for disciplinary action. Such provisions must be streamlined so that teachers and principals can take immediate, fair and effective action to discipline any student who is a problem. Fair treatment can be provided to students without lengthy legal process, and due process can be expedited.

Discipline can be learned, and can be taught. The challenge for educators is to help children develop the skills of responsible behavior by creating an environment in which the children may acquire those skills. Discipline should not be an annoying distraction, but a crucial part of teaching. Research also shows that classroom organization and management, as part of instruction, are key elements in an effective learning environment. Positive techniques of effective discipline must become a part of every teacher's repertoire and evaluation. School boards, with CDE help, must take steps to provide education to teachers and administrators on effective techniques for maintaining positive discipline.

Students should be told very clearly and definitively what is expected of them from the first day they enter school, and they should know with equal certainty the consequences should they fail to behave accordingly. Choice, willing participation by students and teachers is the key to successful learning. Students should be involved in setting disciplinary standards, and expected to take responsibility for their actions at an early age. High school students should be expected to play a significant part in setting standards and codes of discipline. Every school should be required by the local board to develop effective methods for involving parents, as well as students, in the disciplinary process.

H. ENGLISH AS A SECOND LANGUAGE

Current law permits students whose predominant language is not English to receive two years of state funding under the English Language Proficiency Act. The State Board of Education has recommended, and the Governor's Task Force concurs, that students should be permitted three years of eligibility for ELPA financing.

Background:

Although the public's commitment to excellent education does not appear to have lessened, according to various polls the status of the teaching profession has declined in recent years. Nationwide studies show that the number of good teacher is declining. Teachers of science and mathematics are attracted to private employment by higher salaries. Teacher salaries have declined steadily in comparison to other occupations. In Colorado real take-home pay declined by three percent between 1972-73 and 1982-83 (after adjusting for inflation). Colorado teacher education graduates dropped from almost 6,000 in 1973-74 to just over 2,500 in 1981-82. CDE figures show that a deficit of 827 math teachers will face the state in 1990 in the absence of positive action. In 2000 the math teacher deficit could reach 1,570 and the science teacher deficit could be 623. These numbers do not reflect the fact that already in Colorado teachers frequently teach subjects, such as math and science, for which they were not prepared.

Comparison of SAT scores show that students entering educaton are in the lower 30 percent of all students nationwide. Many bright, capable women, who once saw education as the only source of employment now are finding jobs elsewhere.

One of the most disturbing findings in John Goodlad's book, **A Place Called School**, was the narrow range of teaching practices used in our schools, especially at the secondary level. He found that customary teaching procedures rarely provide opportunities for students to practice the full range of learning behaviors that this report sets as goals for education. Teachers "lectured, monitored homework, and engaged in activities requiring only rote learning. . . (but) planned involvement of pedagogy did not appear to be an agenda item in the schools of our sample." In other words, teaching and new techniques of teaching are being used only rarely in our schools.

Businesses around this nation spend from $30 to $50 billion each year on training for their employees. One study has shown that 75 percent of all businesses provided some in-house courses for employees, 89 percent had tuition-aid or refund programs, and 74 percent authorized some employees to take outside courses during working hours – and paid attendant costs. "Technological advances, concerns for productivity, and international and domestic competition demand that employers look more closely at the competence of their work force."[1]

Teachers, unlike most employees of private firms, have minimal contact with other teachers while teaching. Other teachers and administrators rarely participate with a teacher in the classroom. Opportunities for interaction and exchange of ideas are limited. Continuing education and training thus are even more important for the teacher, yet, the bulk of a teacher's ongoing training must be attained, and financed by the teachers themselves – teachers who are already being paid less than an adequate salary. Guidelines for in-service training and for courses acceptable for recertification or promotion in present systems are highly variable between districts. Industry appears to have recognized the need to invest in its employees – the State of Colorado has not recognized that need for teachers..

Teachers are, and will remain, the essence of good schooling.

Recommended Action:

The State of Colorado cannot move forward to the high quality of education we all desire unless we are willing to remunerate teachers at levels high enough to attract and retain quality individuals. Teaching must also be formalized and recognized as a profession of excellence. A system must be created which will promote continuing professional development, and encourage and promote outstanding performance by all teachers. The existing method of promotions based on years taught, and on amount of education, should be replaced by a system of career advancement based on fair evaluation. This Task Force also believes the Tenure Act can be replaced by a fair and equitable evaluation process.

Although studies have found that future teachers rank below the average on such tests as ACT and SATs, such data measure only students in schools of education. The data does not measure future teachers who major in a discipline and then add a teacher's certificate to become teachers. Less than five percent of secondary school teachers nationwide received degrees from schools of education. Teachers largely are professionals who strive for excellence in teaching and who are of worth to their community. Their value to the community is more than sufficient to justify the expenditure of public money to train them properly, and to upgrade their skills constantly.

The average age of teachers now in the Colorado school system is 40. At least one-half of the teachers who will be teaching in our public schools in the year 2000 already are teaching today. The focus of teacher preparation and of in-service and post-graduate education for teachers must be an improvement in teaching practices. Teachers must be given ample opportunity to see and use the techniques of teaching which can contribute to problem solving, to integration of ideas, use of imagination and innovation, and to critical thinking. Teachers should be provided with both effective coaching, as part of the evaluation process, and with better role models via master teachers.

The following steps are necessary if the above goals are to be achieved:

A. EVALUATION

Fair, effective, objective evaluation is a pre-requisite for the success of any professional system, whether career ladder, merit pay or single-salary schedule.

The first goal of teacher evaluation is the improvement of teaching. This basically is a formative process which best can be carried out by the teachers.

Self-evaluation is an essential prerequisite. The next step is evaluation by peers. Peer evaluation should focus on the process and strategy of teaching. The results of such review should be guided in-service training which will provide information, skills and techniques. Evaluators must be prepared to provide coaching, as well as providing role models. The details of the process can be left to individual districts, but the state should require that each district and school create effective systems which involve both self-appraisal, and periodic peer review.

The second function of evaluation is summative: to confirm professional competence. This evaluation reflects a summative check which is both process and product oriented. Although peer participation is desirable, the teacher's supervisor should "chair" the review. Review would take place at periodic intervals to be set by the state. The review would use data agreed upon by teachers, evaluators and administrators, and would compare those data with standards and expectations set down by the district. Evaluation should be based on objectives clearly stipulated and understood by the teacher being evaluated.

Ideally, successful evaluation requires that similar procedures be used in evaluating teachers and that identical performances receive identical scores. In other words, evaluations should be as objective and unbiased as possible. School districts should identify and adopt clear standards of teaching -- written job descriptions that include checklists of standard and outstanding performance. Evaluation procedures should produce diagnostic information which can contribute to remediation, and allow measurement of improvements which occur as a result. Evaluation results must be readily available to the teacher rated.

Finally, the rating scales used must be subjected to constant scrutiny, evaluation and research. Studies of evaluation in the past have shown that commonly held ideas of measurable teaching tasks often have little or nothing to do with actual results in the classroom. Moreover, teaching techniques and required skills change over time. The CDE should provide professional assistance and guidance to school districts in this endeavor.

Students and parents should be involved in the development and implementation of evaluation systems in each district.

When summative evaluation indicates unsatisfactory performance, a number of steps will be necessary. First, the teacher should be informed of the result of the evaluation, and given a clear explanation of expectations for improvement -- including a specific and reasonable time table. Formative evaluation and assistance must be a part of the improvement process. The CDE should assist districts in developing guidelines as to time allotted for improvement. After adequate opportunity for improvement has not brought performance to standard, teachers should be given adequate notice that the separation process will begin.

Separation should include a review process set in place by each district that would make separate and independent observation and evaluation of the performance of the teacher involved.

The Task Force believes that each teacher should be provided a fair and equitable evaluation process. However, evaluation can be a success only if the state and the districts are willing to devote the necessary resources to the task. Effective, fair evaluation demands that teachers and administrators receive adequate training. It also requires that staffing be adequate to allow administrators and teachers to carry out evaluation via a specified number of observations. The General Assembly should provide financial incentives to ensure that evaluation can be successful.

B. CAREER LADDER

A career ladder concept appears to best meet the needs of Colorado's teachers for professional development. This Task Force recommends that the General Assembly provide funds to enable a selected group of school districts around the state to initiate pilot career ladder projects. Original funding would be for planning and preparation, but ultimately an increase in funding for teacher salaries around the state is unavoidable, no matter what system is employed.

Career ladders need not be identical. However, they should meet the evaluation principles set out above, and should meet certain other conditions. First, a career ladder should provide for fair and efficient evaluation, as described above. Secondly, it must provide clear, discrete steps in the progression of responsibilities and duties which contribute directly to career development. Thirdly, actual progression up the ladder, once a teacher has become a formal part of the system, should be voluntary. Fourth, it should be flexible.

Participation in the career ladder concept should be voluntary. Once a teacher has completed probation, and become a salaried teacher, that teacher should have the option of continuing at any level of the ladder without competing for promotion. Salary schedules should provide for annual increases in pay, subject to satisfactory performance and completion of whatever continuing education and in-service training requirements the district might create. The salary schedule put in place by the various districts should be constructed so as to allow substantial increases in pay between levels. Businessmen suggest that a ratio of three to one from highest to lowest would be desirable. As noted elsewhere, substantial increases in teacher salaries across the board are necessary if Colorado is to

attract and retain the best teachers possible. Provisions also should be made in any career ladder to allow for entry from outside the system. The Colorado Department of Education should take the lead in liberalizing current provisions for temporary teaching certificates for individuals without requisite education or liberal arts courses. A streamlined procedure should be created by which those individuals can obtain the necessary expertise in teaching techniques which will enable them to become fully fledged teachers. These individuals can bring a wealth of practical experience and new dedication to the profession.

C. TEACHER PREPARATION

Preparation of teachers is the first step in guaranteeing quality education. The Task Force recommends the following actions:

1. High School Curriculum.

For the many who decide, while still in high school, that they wish to teach, a recommended curriculum should be prepared. This should be done by the State Board, in cooperation with higher education and local school boards.

2. Recruiting.

Every effort must be made to recruit the best possible candidates into teacher education, at whatever age level, or from whatever source, e.g., business, industry, colleges or universities. Incentives should be provided for prospective teachers. Low-interest loans should be made available to those students in the top five percent of their classes (or based on SAT test scores) who indicate an intention to teach. Those loans should be written off at the rate of 20 percent for each year taught. Additional loans and incentives must be offered to potential science and math teachers. Even if it proves possible to retain such teachers only for several years, they will have made a major addition to the pool of teachers in the 1985 to 1995 era.

3. College Preparation.

a. Liberal Arts. All teachers should have a liberal arts background. Even those teaching science and math must be capable of relating their subject to the society in which they live.

b. Admission. Admission to teacher education should include multiple, minimum, statewide admissions standards. Among the standards should be:

i. High school rank
ii. High school g.p.a.
iii. College g.p.a. during first 2 years
iv. Scores on CAT, ACT, SAT
v. Documented experiences with children and youth
vi. Recommendations from teachers
vii. Measures of characteristics/competencies
viii. Writing samples
ix. Oral/personal interview

c. Substantive Study. Teachers should be required to declare a specific study major. Elementary teachers should have a double major in a discipline and in "elementary education." All must be able to teach writing and reading effectively. Specialty teachers at the elementary level (art, physical education, music, reading) would be required to declare a substantive major in the appropriate subject.

d. Education Courses. Anecdotal evidence to the contrary, not all education courses are a waste of time. Some courses are necessary to provide a major input into the ability of a teacher to teach, manage time, and maintain discipline. A major, independent review of teacher education is necessary to determine which courses are needed. The Department of Education, in cooperation with the Colorado Commission on Higher Education (CCHE), and deans of education should initiate such a review. Universities and colleges already involved in this process should be encouraged, and their results taken as guidelines. The Task Force wishes to commend the activities of the Colorado Council of Deans of Education for their activities in this and many other areas.

e. Practice Teaching. Students should be encouraged to do some practice teaching at the earliest opportunity. Limited teaching experiences and contact with the classroom should occur at least by the junior year. Some will find they don't really wish to become teachers. Others will gain a much better insight into the need for training as educators. Guidelines for practice teaching should be clear and specific. They should stipulate the number of hours to be taught, and the situation in which they will teach at the school. Participation by master teachers as well as by university faculty would be desirable in evaluation. Practice teachers should be encouraged to use video taping as a method of self-evaluation.

f. Requirements for Exit from Training.

i. Every teacher candidate should be required to pass a battery of tests which demonstrate competence in the traditional academic subjects. Special tests should be administered in the teacher's major and minor subjects. The candidate's ability to relate to, and work with, children should be observed and evaluated.

ii. The ability of every teacher candidate should be assessed by a panel of judges.

The judges should include at least one master teacher and one college faculty member who have observed the candidate in the classroom.

iii. Selection of appropriate testing, and guidelines for judges should be established by the Department of Education, in cooperation with colleges and universities.

iv. Upon satisfactory completion of these tests, a candidate would receive a "provisional teacher" certificate. This certificate would accompany the candidate's diploma. Test results and video tape would become a part of the candidate's portfolio for presentation to potential employers.

D. STATE CERTIFICATION

Participation by the Department of Education is implicit or explicit throughout the above process. If the steps outlined above have been completed, and if course content of education programs at the institutions involved have been thoroughly reviewed, the Department should be in a position to grant the teacher's certificate immediately. This implies that the Department will take steps to strengthen the certification process. The Department must be willing to withhold certification to institutions that do not achieve the excellence in teacher preparation that is the intent of this report. Certification must not be a rubber stamp.

In order to provide for out of state or "out of career" applicants for teaching positions, the Department should review and revise current procedures. Flexibility should be the goal of such revision.

Applicants from outside the teaching profession should be subject to the same testing procedures that apply to the candidates for regular teaching certificates. However, provision could be made for outstanding applicants to teach on a temporary (one to two year) basis while they complete any courses or training they might require in education or liberal arts. State Department requirements for such courses should allow for a candidate's experience.

E. RESEARCH

Implicit in the concept of teacher evaluation and in the certification process is the idea that society now knows what constitutes effective teaching. Yet, a variety of studies has cast serious doubt on that assumption. Many recent remedies for education have stated it is more important for teachers to know their subject matter than to know how to teach. But, many experts have found that how a teacher teaches may be more important than what is taught. In fact, a synthesis of content mastery and pedagogy is the ideal prescription. The General Assembly should ask itself whether a reasonable investment in the study of "teaching" would not reap substantial rewards. On-going independent research would make major contributions in this field and would be of inestimable value to the Department of Education, the State School Board, and the district boards of education in deciding on the components of good teaching. The results would be valuable in evaluation of provisional candidates and in evaluation of existing teachers. This Task Force recommends that a project proposal be presented to the Board of Education, and submitted to the General Assembly for funding in 1985/86.

F. NECESSARY PREREQUISITES FOR IMPROVEMENT IN COLORADO

An appropriate career ladder, a fair and effective system of teacher evaluation, major improvement in the certification process and better remuneration will go far toward implementing a truly excellent system of education. However, the following complementary steps will be necessary if reform is to succeed.

1. In-Service Training

The majority of teachers who will be teaching 30 years from now already are in the system. They are the products of the system we now are assessing. The first focus of a reform effort should be on those teachers. There is a large body of anecdotal evidence that many graduate level courses in education are of marginal value or irrelevant to education. Many teachers have stated that the in-service programs offered in their schools also were of very low quality.

The State Board of Education, in concert with the Colorado Commission on Higher Education, and with the participation of leading figures from Colorado colleges and universities, as well as secondary teachers and administrators, should conduct a systematic evaluation of current training, both in-service and graduate level. The Board of Education should appoint such a committee tasked with making significant changes in the shortest possible time. After completing its review, this special committee should make recommendations for an on-going body which could advise school districts about the value of different programs. School districts might well decide that only courses approved by such a body would be acceptable as teacher training.

Each school district must be aware of the burden which training places on the teacher, and must be prepared to make the financial commitment involved. Recommendations on basic curriculum, and on minimum amounts of pupil/teacher contact will mean that additional time must be set aside for teacher in-service training, and teachers must be compensated accordingly. The state must consider means by which teachers can be encouraged to improve their ability to teach, and provide the required incentives. The Task Force recommends that the state create a special scholarship fund to pay

tuition and a minimum stipend for some 1,000 teachers to take approved courses each year. Selection will be on a competitive basis.

2. Classroom Management and Training

Teachers must be given **adequate time** for classroom management (grading of examinations and homework, administrative details) **and training**. Tasks such as supervision of lunch hours and playgrounds, and monitoring halls easily can and should be handled by employees whose time is less valuable. Teachers would then use available time to interact with students in more positive ways. Administrators should make every effort to reduce clerical tasks to an absolute minimum. Computer technology should help considerably. The Department of Education should take the lead in developing or seeking computer software for this purpose. School districts should consider contract years which allow extra, additional weeks of planning and training.

3. Better Material

Teachers must have the latest and best **teaching material** available. Materials certainly include textbooks, but also can include computers, audio/visual techniques, graphics and other technological innovations. Teachers should be allowed a maximum degree of freedom to select appropriate textbooks and other material within the bounds of established curricula. Censuring textbooks or other teaching material will surely be destructive to the feedom of thought which is essential to learning. The General Assembly should be willing to appropriate funds to improve the quality of teaching materials.

G. RECOGNITION AND REMUNERATION

Every effort must be made by the Governor, the legislature and local boards to recognize outstanding teachers. Teacher of the year awards should be established in each of the major curriculum areas. These awards could take the form of cash or fellowships, but recognition is the key. Each district should be encouraged to select its best teachers as nominees for the state award, and the nominees in turn should receive recognition in their home districts. Each school building should make similar nominations and give similar rewards.

It has long been recognized that non-monetary rewards are highly important to teachers. Otherwise, we would have far fewer good teachers than is now the case. In today's world, however, good teachers are being lured away from teaching at an increasing rate. Part of this movement is due to a marked increase in the opportunities and encouragements for women to enter fields beyond the traditional ones of teaching, nursing, and secretarial work. Part is also due to the fact that salaries have fallen far behind competitive salaries in private employment. We must find the resources to increase teacher remuneration substantially. If we don't, the best teachers, those we most wish to attract and to retain in the system, will go elsewhere. Recognition and increased remuneration must go hand in hand.

A. THE PRINCIPAL

Background:

Competent and vigorous leadership, backed by support from school boards and superintendents, can yield significant returns. Effective principals can create and nurture an environment conducive to learning. The Carnegie Study of High Schools found that in schools with high achievement and a clear sense of community "invariably . . .the principal made the difference. Like a symphomy orchestra, the high school must be more than the sum of its parts. . . Strong leaders (are) needed to pull together the separate elements in the school and make them work." Strong instructional leadership from the principal impacts more on school climate, and program effectiveness than the action of any other single individual. Yet, a paradox exists. Instructional leadership and management are not always synonymous -- in some cases they may even be partially contradictory.

In the past fifty years, school systems, as nearly all public institutions, have become increasingly bureaucratized. Control of personnel selection, placement, promotion, evaluation, and salaries largely have slipped away from principals. Expectations that schools should provide public services such as meals, health care, and transportation; increased specialization of knowledge; and collective bargaining have changed the world of the principal enormously. The sheer size of many schools, increasingly complex legal procedures, and increasing demands from courts and state and national government have further added to the administrative burden of the principal.

Teachers in this nation generally do not perceive principals to be instructional leaders because the principals are often not involved with instruction or their involvement with other tasks masks their minimal involvement with instruction. The actual time principals spend planning, implementing and evaluating instructional programs with staff members is far from the ideal suggested by research on effective schools. In addition, **superintendents** generally consider principals to be "managers."

When principals neglect instructional leadership in favor of spending more time on attendance, discipline, public relations, fund raising, budget management, and bus scheduling, the day-to-day responsibility for curriculum falls to the teachers. As a result, the emphasis is on "getting along with students," and "not adding to the burdens of an already busy administrator" with additional disciplinary problems, according to some research.

Far too little has been done to define the job of principal. One recent study found that formal job descriptions for principals in 1979 differed very little from descriptions in 1931, despite the dramatic changes which have occurred in those 48 years. Principals found that they faced ambiguous and conflicting role descriptions of their work, and that their self-evaluation of performance was inconsistent with that of their supervisors.

Selection of principals does not appear to focus on finding individuals with the time, energy and training to act as successful leaders of instructional programs. According to John Goodlad, in **Facing the Future**, principals are chosen, "not because of their leadership abilities, but with the expectations that they will maintain the system . . . Many elementary principals have had little or no experience in the classroom and simply are lacking in ability to help teachers."

Most principals elect to become administrators early on in their teaching career. Most then spend a number of years as assistant principals or counselors concentrating solely on such topics as building maintenance, attendance and discipline. By the time they are selected as principals, the freshness of their ideas of teaching and teacher problems inevitably suffer.

Certification of Administrators (a Type D Certificate) largely is determined by academic accomplishment, such as the completion of a master's degree in education administration. The principal is required to "assume the administrative responsibility and instructional leadership" in schools and charged with the planning, management, and evaluation of the educational program of the school "to which he is assigned" in Colorado Statutes 22-32-126. No procedure has been set down, however, under which principals or other administrative personnel with Type D Certificates would require recertification, as is the case with teachers.

Finally, it is necessary to point out that recent years have brought a severe pinch in education funds. Often this pinch has been absorbed by cuts in administrative personnel in preference to reducing teaching personnel. If the principal's ability to act as instructional leader is hampered by the need to take over additional management tasks because of administrative staff reductions, then an "administrative" solution actually may bek more damaging to schools in the long run than cutting staff elsewhere.

Recommended Action:

An improvement in the performance of the state's principals is perhaps the best single focus for educational reform. Principals represent a manageable number: less than 1300 individuals, as opposed to 33,000 teachers. Much has been learned about principals in recent years, and those findings can be taught quickly and efficiently. Most principals in this state already are of high quality and can be expected to respond immediately and favorably to initiatives for improvement.

This Task Force suggests six positive steps to ensure that the state has strong leaders who allocate resources effectively, and are aware of classroom problems, in every school in this state.

1. Clarification of Task.

   The principal must be both **instructional leader** and **manager**. Excellence in instructional leadership, without good management, will not produce an environment suitable for teaching and learning. Colorado school districts should make it clear that the first task of the principal is instructional

...dership. When schools are so large that effective ...structional leadership is difficult, districts must work out satisfactory delegation of management responsibilities -- arrangements which preserve and protect the principal's function as instructional leader.

Districts need to review and refine principal job descriptions so that individual principals, central office staff, parents, students, and the community all understand what is expected. Precise statements of expectations will guide principals in setting priorities and organizing their time. They also will buffer or protect principals from conflicting expectations from teachers, parents and others. Without these statements, principals will continue to be pulled in a multitude of directions.

One cosmetic, but necessary step in this process is the renaming of principals. The Task Force recommends the school boards across the state return to the practice of naming principals "principal teacher."

Despite the emphasis on instructional leadership, principal teachers should not forget that management can and must be used to reinforce instructional goals. For example, research shows that achievement is greater in schools where discipline is imposed positively and where teachers are sure of support from their principals. Where teachers and principals demonstrate respect for their students, communicate their high expectations, and apply consequences for erant behavior fairly and consistently, educational achievement is dramatically improved. Allocation of resources among and between teachers can and should be done in ways which encourage and reward teachers who actively are working toward the educational goals of the school. Resources can and should be made available to those teachers willing to take risks -- willing to take chances in pursuit of excellence.

Because principals often may delegate managerial tasks to assistant principals, every effort must be made to ensure that those delegates -- often the principals of the future -- are required to participate in and contribute to instructional goals, and that they too are qualified, as are all other participants in the system.

Although the ultimate responsibility for defining the role of principal rests with the school board, superintendents and principals in the district can greatly improve the usefulness of the final job description. Districts could establish task forces of principals to outline opportunities, problems or constraints, and develop recommendations for the superintendent, or form broader-based advisory task forces with representation from the central office, teachers, parents and principals. If districts stress the instructional leadership role, principals will focus a greater amount of their energy on activities that directly or indirectly support student achievement.

2. Evaluation and Incentives.

Principal teachers, just as teachers, deserve to have clear objective criteria upon which their performance can be based. The evaluation system developed by a school district should be consistent with and should reinforce the principal's job description.

The detailed criteria for evaluation should be developed via close collaboration between school boards, superintendents, principals, parents, and teachers and university educators. Recent research into effective schools and excellence in administration also provides some excellent examples. Some examples of items which might be placed in a principal's job description follow:

a) Realistic, concrete plans to improve instructional leadership, a statement of goals and objectives, specific activities that will help achieve those objectives, a time line for realization of activities, and a description of resources needed. Planning is essential to a principal's knowledge of where the school is, where it should go, and how to get there.

b) Develop working relationships with business and community. Businesses can contribute to management skills, and can offer new perspectives into problems.

c) Development of regular teacher evaluation schedules, as well as training/preparation in evaluation. Every principal should be well versed in the constitutional rights of students and teachers.

d) Knowledge of advances in clinical supervision, teaching techniques, and in teaching hardware.

e) Willingness to allow for and encourage wide latitude in teaching modes; ability to influence teachers in a collegial atmosphere which recognizes and promotes individuality.

f) Acceptance of authority and responsibility, specific examples such as recruiting and hiring.

These are only a few examples of the kinds of evaluation material which can be developed. The actual evaluation of principals will be a difficult matter. Some school districts will have few resources to develop criteria and evaluators and may lack the staff resources or the expertise to perform evaluations properly. This Task Force recommends that the accreditation process of the Colorado Department of Education include a specific and detailed evaluation of each principal teacher in each school. Accreditation should include a review of the performance criteria established by the district, and the principal's success in achieving those criteria. The Colorado Department of Education should assist the various districts in developing criteria for measuring principals by disseminating existing research and sharing successful programs from other districts.

As in the case of teachers, however, evaluation of principals should include examination by another principal from a totally different district. The accreditation process should be accomplished without the introduction of new paperwork and new administrative requirements. This Task Force recommends that accreditation be coordinated with the visits of the North Central Association so as to streamline the process. Actual evaluation of principals and administrators should be carried out by a small team consisting of at least one senior administrative practitioner, along with at least one teacher, and one representative of the community in which the school being evaluated is located. Such examinations will require a broadening of the Colorado Department of Education's current accreditation activity, and will require additional funding from the General Assembly.

3. Selection/Certification

Research has shown that most principals can develop the leadership skills necessary to succeed. However, persons selected for administrative programs should possess high intelligence, high energy levels, a strong desire to succeed, and a basic commitment to the concept of instructional leadership. The selection of principals should begin with stringent university standards for admission to administrative training. A prime ingredient in any selection process should be successful teaching. The requirements for a Class D certificate should be reviewed by Colorado Department of Education certification staff and strengthened.

After satisfactory completion of required study, candidates for Class D certificates should be required to complete an intensive internship program. Regular formative and summative evaluation of the candidate should be included. Only after successful completion of an internship should Class D certificates be granted. The CDE should take the lead in helping districts develop the techniques necessary to identify administrators and teachers with the potential to become effective leaders.

4. Training/Preparation

A drastic overhaul of existing training programs for administrative officers is required. Training programs must be designed which wed theory to practice. These programs must be directed at the goals which have been identified as contributing to the performance of effective principals. This Task Force recommends the creation of one or more Administrative Academies for this purpose. Such an academy could be made up of the best courses from existing Schools of Business Administration and Education. Harvard University's Graduate School of Education and the Peabody College at Vanderbilt University have already begun programs which can serve as models. An academy should be authorized to create a workable curriculum for excellence in administration. Part of that charge would involve further research into effective administration. An Academy should produce results which would be directly applicable to the creation of job statements for principals, for evaluation, and for selection of candidates.

The Task Force recommends that the Legislature require the CCHE and the Colorado Department of Education explore the establishment of an academy or academies with existing institutions of higher education in Colorado.

5. Retraining/In-Service Training

Even the very best of our principals must exert constant effort to stay abreast of teaching developments, while simultaneously improving management skills. Just as industry has recognized the importance of continuing education, so also must the state be willing to invest in its instructional leaders.

Research has identified a number of skills which should be a part of any training program to enhance the instructional leadership of the principal. These include:

a) Group process coordination
b) Goal setting (group and individual)
c) Action planning (group and individual)
d) Clinical supervision
e) Staff development
f) Curriculum development
g) Performance management
h) Time management
i) Communication
j) Evaluation
k) Classroom management

Not every principal will master all of these skills. Some principals, however, already will have mastered most, if not all, of them. It will be the task of a quality training program to provide for the individual needs of the principals. The training program should be closely coordinated with existing curriculum expectations and should be used also as a vehicle for articulating the expectations and goals of the different districts. The program must be on-going and long-term. It must aim first at the most pressing needs of our principals, and then progress to complete the total picture. The Colorado Association of School Executives (CASE) should be consulted and supported in its effort to re-train administrators.

As noted above, a state funded management training academy would add immeasurably to our ability to train quality administrators. However, for retraining purposes, it would be highly desirable to set up several regional academies. The needs of administrators vary according to location, size, geography and ethnic makeup of the school. Four to six regional academies, established in key areas around the state could meet the varied needs of our

different districts. These academies, or workshops, need not have permanent buildings or staff. Workshops could be taught by expert consultants, augmented by senior practitioners who are using what they are teaching. These regional academies could further wed theory and practice by incorporating expertise from private business, as well as from academe. An excellent beginning already has been made by CASE. The Department of Education, CASE or a central academy of administration could coordinate regional academies and course offerings.

6. Recertification

Recertification should be instituted for Class D certificates. Recertification should be based on a review of performance evaluations, on a review of job statements for each individual. Recertification should be made a part of the existing accreditation procedure now in use under the Accountability Act of 1977.

The Colorado Department of Education should specify the types of review it will be undertaking, and circulate regulations to all school districts.

B. SUPERINTENDENTS AND SCHOOL BOARDS.

Background:

According to Willis D. Hawley, Dean of the Peabody College, district level administrators should focus on the politics and financing of education, with inevitable involvement in setting standards and requirements. Principals should be delegated real leadership in the school. Little research has been done, however, into the actual job of superintendent, and the skills necessary for success.

In the extended Denver metropolitan area the ratio of students to central administrators varies between districts from a minimum of 246:1 to a high of 856:1. The ratio of total teachers to total central administrators also varies, from 6:1 to 12:1 for all levels of school. Teachers to building administrators vary from 10:1 to 22:1 for senior high schools. It is difficult, if not impossible, to explain such differences by size, geography or philosophy. In other words, there is no observable consistency in patterns of administration. No conclusions can or should be drawn regarding the efficiency or inefficiency of any school district involved in this study. Local control of education is, correctly, a carefully guarded prerogative. The diversity of this state is such that central control would be difficult, as well as unwise. Nevertheless, far too little is known about district-level management.

Recommended Action:

School boards should carry out effective, objective evaluation of the superintendent they hire. Administrative procedures and practices cannot be dictated by the state, but are unique to each district. Nevertheless, there is a clear presumption that efficiency could be increased and costs minimized via an effective review of administrative procedures. We have alluded elsewhere to the bureaucratic burden which now faces schools. The Colorado Education Association has called for efforts at every level of state and local government to reduce paperwork and administrative trivia. The state legislature should immediately appropriate money for a detailed study of school administration in Colorado. A competent management consultant should be engaged to advise on ways in which administration can be streamlined and improved at every level -- including at the building level. The management study should examine and recommend ways in which administrative details can be centralized in district offices, while authority and responsibility is decentralized to principal teachers. This state needs professional advice on the number of central administrators needed to manage district offices, and means by which the efforts of administrators can be maximized. Although the results would not be binding, school boards and voters could be given a detailed, professional insight into the way the school system is operated, and the way tax dollars are spent.

The management study also should examine existing job statements for superintendents and existing evaluation practices. Each superintendent should have a job description which accurately describes his or her objectives, and clearly sets out specific accomplishments for a rating period. Rating periods also should be stipulated, and adjusted according to the particular needs of each district.

Because school board members are the backbone of citizen participation in public education, it is imperative that they receive the best possible preparation for their positions. The State Board and the CDE in recent years have offered a variety of training courses for board members.

This program should be continued and expanded. The various ideas expounded in this report, such as career ladders, teacher evaluation, principal job descriptions, and regular evaluation of superintendents will require an ever-increasing degree of sophistication from future board members. Training courses can provide sound advice and guidance without violating local autonomy. The State Board and the Colorado Association of School Boards should also continue and even expand their efforts to facilitate communications between districts.

Background:

A. STATE SUPPORT FOR EDUCATION

Colorado ranks eighth in the nation in per capita income, yet is only 26th in per capita expenditure on education. Colorado spent $2989 per student, slightly more than the national average of $2952, in 1982. Colorado ranks second in the nation in median years of education, yet ranks only 22nd in percentage of ninth graders completing high school. Colorado ranked only 30th in number of pupils per teacher in 1982. Teacher salaries in Colorado ranked only 17th in the nation, and **declined** by three percent in real terms between 1972-73 and 1982/83.

We are now 42nd in the U.S. in percent of public school revenue which comes from the state government. On average, states in this nation pay 48.8 percent of the total cost of public education. In Colorado the state pays only 36.9 percent. A recent study ranked states by their efforts to improve public support for education between 1977-78 and 1982-83. "Effort" was measured by the level of state support per $1,000 of personal income. Support decreased by more than 10 percent in only 18 states. Unfortunately, Colorado is in that bottom 18. Colorado also ranks with the 22 states that have **both** low state expenditure per pupil and low expenditure per $1,000 of personal income.

In 1982, total operating expenses for public education were approximately $1.6 billion. In Colorado, that boiled down to less than $3.00 per student per hour. Costs for 1983/84 are budgeted at $1.8 billion -- around $3.30 per student per hour. Public education cost each man, woman and child $497 last year (about 16th in the nation). Surely, this is one of the best bargains since the Dutch bought Manhattan Island.

B. THE COST OF DOING NOTHING

Although Colorado student achievement is above the national average, employers frequently report that new employees do not possess adequate skills in math, problem solving, and reading and writing, and often have a poor attitude towards work.

According to the American Society for Training and Development, U.S. business spends some $30 billion annually training employees. Experts estimate that from 10 to 35 percent of that total may go for remedial training in reading, writing and arithmetic. A recent study showed that 75 percent of the nation's firms carry out some type of basic skills competency program within the company. Two companies said they spent a quarter of a million dollars each for remedial training that should have been accomplished at the ninth and tenth grade levels. American Telephone and Telegraph Company has reported spending an estimated $2 million per year to teach 14,000 employees basic writing and arithmetic. Metropolitan Life recently was reported to devote more than 40 percent of its training to teach English usage and general mathematics. We have no accurate estimates of the losses caused to business, and to the economy as a whole, by employees who may not be able to comprehend simple written instructions, and thus destroy a machine or produce a defective part. One company said, in the report mentioned above, that 70 percent of outgoing correspondence must be corrected and retyped at least once because of poor spelling and punctuation.

The state and federal governments also pay for remediation through a variety of training programs. Some $900,000 in federal money, and another $200,000 in state money, are spent in Colorado each year to teach basic skills to students under the Vocational Education Act. The Air Force, the Army and the Navy spend large amounts of money on remedial training of recruits. Colleges and universities around the state report spending considerable sums to upgrade the basic skills of entering students.

Other indirect costs are incurred when education fails. More than 70 percent of all inmates in the nation's prisons and jails dropped out of school by the age of 16, according to the U.S. Department of Education. Just under 60 percent of Colorado's inmates have no diploma or GED equivalent, and some 67 percent of those in community corrections have neither diploma nor GED. It costs some $21,000 to maintain a prisoner each year in Colorado -- only $500 less than the average teacher earns. We do not know how much damage criminals may have done on their way to incarceration -- nor how many millions of dollars worth of goods were stolen or destroyed.

As of April 1982, almost 20 percent of all unemployed people in this state were high school dropouts between the ages of 16 and 19. If each of those drew only $50 per week for a full 26 weeks of unemployment, the cost was almost $7 million. We do not know how many of those remaining on the unemployment rolls dropped out before graduation -- or could be classed as functionally illiterate even though they possess a diploma -- but we can be certain that those without an adequate education swell our unemployment and welfare rolls.

There are additional costs which better education can help offset, but which cannot be quantified. Suicide now is the second most frequent cause of death for Colorado's teens and pre-teens. Early pregnancy, drug abuse, alcoholism, all are endemic in our culture. All bear monetary, as well as psychological and sociological costs. All can in some way be attributed to failures of society, and might have been reduced by better educating the individuals involved. This statement in no way implies that new courses or programs should be directed at such problems. Rather, the Task Force has noted that second-rate education adds to the societal and economic factors, such as higher divorce rates and unemployment, which are more significant in explaining the problems listed above.

C. CURRENT FINANCE ACT

The Finance Act of 1973 was designed, appropriately, to equalize the ability of local taxpayers to support their schools. It was intended to provide an adequate total

revenue base and to preserve local control of education, while simultaneously reducing the burden of local property taxes. During the past decade, the state share of total education spending had risen to 37 percent, as against 28 percent in 1972/73. Various revisions and improvements have brought the functioning of the Finance Act ever closer to reaching its stated goals. However, concern about the act persists. Questions include:

1) The complexity of the system, with its "Authorized Revenue Base" and its "Full Time Equivalents."

2) The equity of the system -- the suspicion that the act may have provided more benefit to wealthy than to poorer school districts.

3) Omission of capital costs and bond redemption in the act.

4) Degree of control at both the state and local level. Districts have difficulty planning and budgeting, and the state may be required to raise support in response to local action, regardless of other considerations.

5) State support based on **quantity** of students does not necessarily support **quality** improvements. One expert has stated that emphasis on **number** may, for example, prevent public schools from releasing students to the community college system -- students who are ready to move on to university or vocational study -- because of **monetary** concerns.

6) Quality oriented -- provide incentives for school districts to improve their program of education -- focus not on quality of enrollment, but on quality of education.

None of these above concerns are offered as conclusions. Many qualified observers have concluded that the School Finance Act, as now constituted, substantially meets the goals originally set for it. At this time, however, the focus in Colorado, and in the nation, has shifted to quality. Every citizen in the state, the legislature, and the executive branch must consider whether or not the Finance Act is suitable for the future.

Recommended Action:

No member of this Task Force is so naive as to believe a better system of public education will remedy the economic and social ills of our times. In fact, schools too often have been looked upon as some sort of panacea for society's problems. Better education cannot, for example, assure employment when the economy is at the bottom of a business cycle. However, a better educated and prepared workforce, especially a workforce prepared for lifelong learning and able to be retrained quickly, provides an attractive base for investment.

Firms considering possible investment sites will evaluate not only the available workforce, but also the educational opportunities which will be available to children of the firm's employees. Investment in excellent education can and will make a difference in Colorado's development in many, diverse ways. The investment is small; the potential rewards are enormous.

The Gallup Poll carried out in September indicated that Americans are willing, by a substantial majority, to pay for better education. Recent elections on increased tax levies in various Colorado school districts indicate that Coloradans also are willing to pay for better education. However, the emphasis here must be on "better." If the state is to ask its taxpayers for more money to finance education, it also must give them good reason to believe they will get what they are paying for. The education system must deliver excellence or the taxpayers will rescind their mandate. A structure for excellence is set out in this report. The Task Force believes the actions recommended will produce the excellence we and the citizens of this state demand. However, the system proposed can succeed only if properly funded.

The General Assembly should make the funding of public education its top priority. The Task Force recommends that a high-level group be brought together by the legislature to evaluate the existing School Finance Act. This group should make firm recommendations to the General Assembly in time to permit preparation of legislation before the 1985 session. The group of experts should bear in mind that new sources of revenue may be necessary, and that it is necessary to achieve real improvement before deciding to replace the existing system. The following principles should be used to guide the efforts of the experts:

1) equitable -- low-wealth, low tax base districts should receive substantial assistance from the state -- the state should bear an increasing share of total costs

2) stable and predictable -- each school district should know with reasonable precision the funds it can expect -- should have a sound basis for planning and budgeting

3) adequate -- state assistance should be sufficient to guarantee that every student in Colorado will receive a quality education.

4) fairly distributed -- those most able to pay should bear proportionally more of the costs

5) simple -- comprehensible to voters

6) quality oriented -- provide incentives for school districts to improve their program of education -- focus not on quantity, but on quality of education

7) supplementary -- should add to, not substitute entirely for, local resources.

Background:

The efforts of this Task Force have been focused on K-12 public education in Colorado. Colleges and universities are, however, the ultimate destination of many of our high school graduates, and the source of our teachers. What happens in higher education has a significance for public education which cannot be ignored.

The schools of education within our universities, and our teacher colleges must receive our attention. The quality of graduates from schools of education has been questioned regularly in the recent past. Several studies have shown students in schools of education represent the bottom 25 percent of SAT test takers.

Critics have pointed out that curricula in schools of education are not always targeting the educational needs of future teachers. Several members of the Task Force also have noticed a lack of communications between our public schools and our colleges and universities. Faculties of teacher colleges do not, for example, appear to follow up on the success or failure of their graduates as often as they should.

In far too many cases, universities and colleges may be required to accept high school graduates from the state regardless of whether that student is capable of college level work. Standards of admission may be set so low as to be almost non-existent. This practice results in substantial efforts at remedial education, efforts which are costly, and not always successful.

Recommended Action:

All four year colleges and universities should achieve a significant increase in admission standards. The Task Force applauds the actions of the University of Colorado at Boulder in this regard, and the recommendations of the joint Committee on College Expectations of the CCHE and the CDE. As noted in Section V, admission standards for admission to teacher training must be even higher. Increased admission standards will have direct, positive impacts on schools around the state. They will adjust curricula in response, and they will demand more of students from kindergarten through high school.

Schools of education must take the initiative in creating new and exciting programs of teacher education and preparation. These courses must incorporate the latest studies on teaching, such as **A Place Called School**, by John Goodlad. Courses also must incorporate modeling and coaching of teaching techniques. The attention of schools of education must be directed toward continuing preparation and retraining of existing teachers and administrators, as well as new teachers.

Many initiatives already are underway. The Task Force commends the efforts of the Colorado Council of Deans of Education, and urges them to redouble their efforts. They also need the support of the presidents of the universities and colleges involved. The Task Force also urges the Colorado Commission of Higher Education to take the lead in establishing intimate working relationships between itself and the CDE. This request is in complete accord with the charge set out in Title 23-1-108(D) of the Commission's mandate, which states that the CCHE should "maintain liaison with state-supported and private **secondary schools** and the **Department of Education**." (Emphasis added.) Closer cooperation between CCHE and CDE on teacher certification, and on research into teacher behavior and patterns of excellent teaching are an important component of any reform package. Colleges and universities must be encouraged to establish closer, more productive relationships between themselves and the public schools of the state. Schools of education must know what is remiss, or what is excellent, in the teacher graduates they are producing.

One aspect of better communication between universities and public schools might be a sharing of teaching duties. College level faculty could benefit from teaching experience in the public schools. Teachers now active in public schools have a wealth of practical experience to share with students and with educators in the schools of education. The Task Force recommends that the General Assembly appropriate funds to finance a program to bring selected public school teachers back to colleges and universities. A group of 15 teachers would be selected each semester to serve as visiting scholars on full salary and expenses.

The Task Force also urges that colleges and universities cooperate fully in the effort to improve the teaching and preparation of administrators, as noted in Section VII.

FAMILY, CULTURE AND COMMUNITY

Background:

For better or worse, the traditional family -- mother, father and children -- no longer is the single most important unit in our society. Researchers in California have identified at least 14 separate family units, and expect to be able to identify more than 75 within a decade. As many as 65 percent of the children in our schools today live in a family with only one natural parent. Families move so often that the turnover rate of students in some schools in the Denver area actually exceeds 100 percent. The number of family units in which both adults work is so large that "latch-key children" are thrown upon their own resources for large periods of time, and often without the sort of friendly neighborhood concern which characterized our state in former years. At the same time, we hear from educators that the single most important factor in achievement levels is the parent. Children with parents who are interested in and involved with their schools and school work are children who will accomplish more. It seems that the parents are the most important factor in setting the level of educational expectations for their children.

In addition, we find that children, latch-key or not, spend more time watching television than they spend in school or doing school work. They are subject to exposure to an entirely different sort of educational media from any encountered by today's adults. The impact has been widely studied, but conclusions as to the total impact are not always useful.

Simultaneous with a change in the family has come a change in the educational consumer in our schools today. Minority attendance in the public school system has increased enormously. The degree of contact between school and parents has changed. Parents today may come from an entirely different background from the teacher, and may have no familiarity at all with a system of parental involvement with the school. The traditional system of parent/teacher conference and PTSA meetings may no longer work.

Finally, demographic changes have reduced the number of citizens who have a direct stake in public education. Today less than 30 percent of the population is in school or has children in school.

Recommended Action:

Teachers of today and tomorrow must be prepared to deal with children who are the product of different families, different cultures, and different times. They must learn to recognize symptoms of stress -- child abuse and drug abuse -- and know how to refer children for help when necessary. Teachers are not responsible for family development, nor should they be social workers. However, if they cannot deal with the children in their classroom, they cannot be effective teachers. Our schools of education must assist in preparing new teachers to handle children of recently divorced parents. Teachers already in the system should have frequent exposure to in-service training to enhance their knowledge of what is happening to their students. Principals and superintendents must understand the impact of social changes on the classroom, and the changes which must be made in our traditional versions of how discipline is applied in the classroom.

Every school and school district in this state must expand and enhance efforts to bring parents back into the schools. It will not be easy to involve parents who work in the city with their suburban schools, or to reach parents who may not even speak English. New alternatives must be found. School's should ask teachers to reach out to existing social and community groups. Principals and superintendents should consider releasing teachers during the school day to meet with parents away from school -- during lunch hours, for example. The state should consider whether or not it is possible to allow parents to enroll children in schools where the parent works rather than where the parent lives.

The state also should embrace and promote community education programs. The average student of today's elementary schools can expect as many as eight career changes in their lifetime. Community schools can help provide the life-long education necessary to achieve those career changes, while simultaneously increasing and enhancing the participation of all adults in the public schools. Community schools also can stimulate increased interest in underachievers and provide more in-depth work for highly motivated students. Mentor/apprentice systems such as those in place at Gove Community School in Denver provide excellent models. These community school programs may also be able to pick up electives dropped from day school under the curriculum reform this Task Force expects. One example might be driver's education -- a course which deserves to continue because of its impact on highway safety, but which may not fit into new curricula. Effective community education programs, with up-to-date offerings, can ensure that the community at large has access to the latest changes in technology.

Community education is a valuable resource that is severely underutilized in the education system. The community education process can provide incredible support to school staff, parents and students. Community education is also an important resource to the community which provides a center for citizens to come to share their knowledge and to learn new skills. Community schools provide an essential link between schools and the community. Community education needs to be recognized and commissioned by the State Department of Education and key local school districts to do the work they are so able to do.

Schools should make a concerted effort to reach retired persons. These individuals provide a magnificent, yet largely untapped resource for our schools. They can provide tutoring assistance on a one-to-one basis, can serve as classroom aides, can assist with administrative tasks, and can provide technical expertise in specific areas. They can also provide that contact with the elderly which is so important, yet often missing from the early childhood spent outside of the extended family. The CDE should provide advice and encouragement to schools in

this effort. The General Assembly might well wish to provide funding for a full-time office in the CDE to pursue this program.

Minorities in America will continue to have special needs, and new minority groups will emerge, as the decades roll on. Special language and cultural considerations will always be a chief concern in terms of education. Education should build upon the natural pride that the minorities should take in their origin and their diversity. These are complex and sensitive issues, but they must be addressed.

Excellent education is not elitist. This Task Force intends that every student in Colorado be educated to his or her fullest potential. This does not mean that all will attain equal levels of achievement, but that each will be challenged to the maximum.

The racial and ethnic minorities now are entering a critical period in their development. If they do not manage to enter the information age with the rest of American society they will find themselves occupying the niche of the "information have nots." They will find themselves falling ever further behind the mainstream. If we as a state allow this to happen we will truly be building into our system the seeds of our own destruction. The solution is a school system that provides equal opportunity in fact, as well as in name -- a school system that will challenge and reward -- not promote and eject.

Leaders of the various minority communities have an enormously important role to play in the process of achieving excellence. They already recognize that students who receive a worthless diploma, and who can neither read nor write at an acceptable level, have been cheated. The purpose of the schools is to produce educated graduates, not to bestow on each individual a piece of paper called a diploma. The Task Force calls on community leaders, to take the lead in convincing their constituents that quality education is the single most important factor in the advancement of their interests.

COOPERATION BETWEEN SCHOOLS AND THE COMMUNITY

Background:

If "computer" is the buzz word in American higher education today, close on its heels is the word "partnership." More and more there is an emerging national consensus that sees a tremendous benefit to be realized from stronger ties between education and business. For example, science teachers can greatly upgrade their skills and bring themselves in tune with current technological concepts by spending time in industrial settings. Such teacher internships can literally bring the leading edge of technology into our school classrooms. Conversely, scientists and researchers from industry could well be integrated into the school systems on a part-time basis for lectures, demonstrations and even part-time teaching. Such cooperation between industry and school systems would not only enhance teacher competency and enthusiasm, but also stimulate students toward future career directions. It is the kind of partnership by which everyone wins.

These partnerships would exemplify the ideal in community involvement. Exchanges could even be broader than the industrial/scientific setting. Other fields such as law, merchandising, and commerce could participate as well. All of these people are taxpayers and parents, and thus individual community members would be drawn even closer to our school systems. Intense involvement – constructive involvement – could well be a key factor in bringing our schools up to par in terms of the new challenges. Such partnerships suggest more than mere lip service or criticism. Partnerships imply the action mode, and Americans do best when they are rolling up their sleeves and doing something about a problem.

Recommended Action:

Partnerships deserve more than just rhetoric. They can and should be developed within a consistent, systematic approach. At present a variety of successful efforts exist in Colorado. The Adopt-A-School program in Denver is an excellent example, as is the Denver Chamber of Commerce Technical Advisor Project. The Advisory Committees required for state vocational education programs can serve as useful models for school/community/business interaction. However, much can be done to coordinate the different programs. This state needs a body which can provide central coordination for the various efforts underway, while simultaneously providing encouragement and inducement of those school systems which do not yet have cooperative efforts. Such an effort could help reduce duplicative efforts, could provide advice and guidance, could share experience and mistakes, and could help direct statewide efforts in the most productive directions possible.

This Task Force recommends that the Governor create an office for business/school cooperation. This office can and should be expanded as it gains experience to assist in cooperation between non-business organizations (associations of retired people, for example) and schools.

SCHOOL OF THE FUTURE

Background:

Article after article, report after report, and countless media features describe the complexity of tomorrow's classroom. But for those charged with charting directions and making decisions about the future schools, this myriad of information is less than helpful. The school of the future will indeed emerge, but it won't be designed by popular journalists or science fiction writers. Its emergence must be an orderly process based on solid information and tough-minded decision.

Recently Dr. Wesley W. Posvar, chancellor at the University of Pittsburgh, compared the school's relation to the future "much as a navigator to a ship's course, or an astronomer to a comet's path of advance. Discovery, invention, exploration, and creation are pursued in a [school] through a myriad of curiosities and intriguing questions. The future is its natural jurisdiction." The quote by Chancellor Posvar well serves to remind us that the school of the future should not be defined solely in terms of hardware and technology. Schools have always been and always will be about teaching and learning. When Plato instituted his academy in 380 B.C., he did so in order that young people would have a place to grow intellectually and be guided by mentors who would teach them to ask those "intriguing questions" about their universe. Mere data holds very little significance in terms of the focus scholarship must insist upon. The great data/informational banks which will be available to the schools of the future will in and of themselves do little to truly educate young Americans. Plato's point was that the questions, not the answers, composed the most important aspect of education. In the final analysis, the school of the future must be a place where young learners are guided by wise mentors in the pursuit of asking the right questions of the data banks they will have at their fingertips.

When we speak of the school of the future, we are really speaking of the students, teachers and administrators of the future. The computers and the technology which will aid them must always be secondary to the key concept of human beings teaching human beings within the intimacy of human interaction.

Recommended Action:

Colorado must boldy assess the body of knowledge it feels its young learners must master and then design the technological support systems which will complement the teaching of that knowledge. It must then absolutely assure a professional teaching community which has mastery over that knowledge and can teach it, using both traditional and non-traditional means.

Colorado must re-examine the school model. Research already has shown the incredible importance of early diagnosis of problems and the value of starting schooling at an earlier age than is now the case in our public schools. Many highly successful systems begin when children are 30 months of age. An earlier beginning also fits well with the needs of contemporary society for early child care. The State Board should study the implications of beginning school at the age of four and completing it at the age of 16, as recommended in recent years by John Goodlad and several national commissions. School districts should be encouraged to set up pilot projects – especially in the traditionally under-privileged areas of the state.

The State Board should study the implications of a program of testing to permit 16 and 17 year olds to "test out" for graduation and early admission to universities. The state should develop further the processes whereby gifted children can enter colleges and universities for some or all of their course work, while still in high school. Perhaps the American high school should look more like the American junior or community college.

Educational decision-making at the smallest appropriate unit is a goal towards which we must strive. Despite the obvious curricular and teaching problems, the one room school was one of the best educational institutions this nation has ever seen. While the state may move towards larger administrative units or greater financial equity between districts, it must simultaneously move towards a decentralization of the decision-making, so that all parents are once again involved in the education of their children.

One of the most critical problems in retaining top notch professional teachers is the endless similarity of how teachers must spend their time. In addition to the career ladders, merit pay, and other things mentioned in the report, the Task Force suggests that schools consider creative schedules for their teachers. Five to six periods a day with 180 students, year after year, is bound to take its toll. In addition to different roles within the school, master teachers should be encouraged to trade with university personnel and to spend time as trainers in industry and in other locations which can renew them for their difficult task.

Recommendations that all students take four years of English or three years of math are insufficient to bring about significant changes within the schools. What occurs within the subject areas and in the everyday classroom is critical to meaningful change. Students who can barely write a decent sentence too often are asked to make literary interpretations. Theoretical mathematics makes little sense to a student without the basic mathematical understandings and skills. Political theory without personal connection to political parties and the democratic system is without meaning. Technological or vocational training on obsolete equipment is not only irrelevant, but extremely costly. Medical doctors do internships, lawyers practice before the bar, and teachers do student teaching, yet we expect children and young people to handle theory without meaningful practice or experience. Schools must attempt to provide practice and experience inside and outside the school.

Almost every school in Colorado today has both video tape and computer capabilities. It should be possible at this time to create a series of "master learning" tapes on various courses. Because science and math have been concerns in recent years, the program might best begin

with those subjects. Several master teachers should be sought out to construct and present, via video tape or video disc, master learning courses in math and physics. By doing so, students around the state could have access not only to the very best teachers in the state, but also to an advanced, updated curriculum. This concept eventually could be expanded to include other courses, and could be articulated across various grades.

The computer will continue to be of intense interest to schools, and will offer enormous capabilities as a teaching aid. Ideally, the computer can handle many of the administrative and repetitive skills exercises which now take up teacher time. This would allow each teacher to have much more contact with each student. Each school and each school district must strive to keep in mind that education must not become an interaction between student and machine.

Various school districts in this state, such as Cherry Creek, Jefferson County and Northglenn, already are fully engaged in planning for the future. The Colorado Department of Education is involved via its "Schools of the Future Cluster." The General Assembly should encourage all districts to begin planning for the future, and should encourage the Colorado Department of Education to spread its activities in this arena throughout the state -- and should provide funds to assist in the process.

Finally, this Task Force recommends that a continuing Long Range Planning Advisory Committee be appointed jointly by the Governor and the General Assembly. This group should be small in number, and should receive staff support from the Department of Education. Members of the committee should consist of representatives from parents, students, business/industry, and educators. The committee should be charged with (but not limited to) making recommendations to the State Board on a harmonious, step-by-step process to effectively and creatively move Colorado's school system toward the year 2001 and beyond.

A. The Colorado Federation of Teachers believes that the report of the Task Force constitutes a positive and far-reaching step toward improvement of Colorado education. We accept the vast majority of the report, but would disagree in the following specific areas.

It was our position during discussion that the present tenure act could be improved, but that any change must protect the due process rights of teachers. Specifically, we do not feel that "evaluation" can replace tenure. The fact is that at this time there are no methods of evaluation which are totally objective. When it is proven that we can have objective evaluation, we will reconsider our position.

We also feel that more emphasis should be given to the financial section of the report. Teachers in Colorado, we believe, are ready to accept change and challenge, but unless the financial resources are made available by state and local governments, almost every suggestion in the report, from curriculum changes to career ladders, is doomed to failure. For too many years teachers in Colorado have subsidized education. Study after study – both state and national – have made this point. Now is the time to act.

Signed by: James McKay, President, Colorado Federation of Teachers; Craig Bowman, Alameda Junior High School; Representative Phil Hernandez, Colorado General Assembly.

B. The Governor's Task Force for Excellence in Education is to be commended for the recommendations related to **institutional based education**. The emphasis of this report is on reform, not on optimizing **student-oriented learning**. While the report endorses the tenant of "prescriptive, individual education," the focus is clearly on maintaining the major components of our existing educational system. I agree that this is a positive step, however, I do not believe it fully addresses the goals and objectives of the Task Force, as outlined in the introduction.

The Task Force has not dealt with the fundamental issue facing us: Public Education is so systematized it is neither self-correcting nor responsive to its primary consumer/commodity, the student. Education is provider-driven, much the same as our health care system is. Financing is indirect, the norms and incentives are established by the providers (graduation, not attainment of potential) and choices, except for the wealthy, are non-existent.

Education has traditionally been a "maintenance" function in our society. It reflects the existing economic, political and social mores. When the educational institution lags, outcries such as those in 1957 and today occur.

Public education is not primarily an adaptive or a progressive influence in our society. Pressure for change depends upon response to indirect criticism, and the efforts to modify the existing structure generally occur under extreme stress. Throughout the report the importance of the student is recognized, yet the recommendations do not address the way this "consumer" can define or influence his/her destiny. We have not allowed the parents, students or businesses to directly influence the educational processes. Perhaps increased competition and freedom of choice for these groups would enhance the ability of our educational system to respond to the dynamic demands of society.

Signed by: David L. Foote, The Promethean Corporation.

C. On behalf of the 25,000 members of the Colorado Education Association, I wish to submit these comments regarding the Governor's Task Force on Education Report.

The Colorado Education Association has eagerly and actively participated on the Governor's Task Force, as we searched together for ways to effect meaningful change for our public schools. We have cooperated fully in the group's efforts to create a blueprint for education reform in Colorado.

Colorado is fortunate that our schools have been concerned about and are continually striving for excellence. The Task Force report substantiates that Colorado students consistently score well above national averages on standardized tests of all kinds. Our graduates have generally become productive members of society and, on the whole, we can be proud of our public schools.

While we support many of the recommendations of the Task Force, we reject the report's treatment of teacher tenure.

CEA is willing to reform the Colorado tenure law. We are willing to explore alternatives to address the public's concerns. However, any changes must guarantee due process rights for teachers.

Teachers must still be able to perform their duties free from arbitrary and capricious dismissal. Any dismissal must be for just cause and be submitted to a binding decision rendered by a third party neutral. Reform must ensure that due process rights remain intact and are extended to all teachers.

We are distressed that the report does not include substantive reference to due process rights. It does emphatically state that "policies can be enacted. . . which support and reward risk-taking and innovation." Teachers cannot be innovative unless they can operate in a climate free from capricious whims and reactions and unilateral dismissal.

We cannot agree with the report's recommendation that evaluation of teachers – even fair and effective evaluation – can replace a fair dismissal procedure that is based on just cause and that guarantees due process.

Every teacher in Colorado should have his and her performance regularly assessed by administrators who are well-trained in teacher evaluation. The evaluation process used in every school district should be fair, objective, and based on standard statewide guidelines, consistently applied throughout Colorado. The purpose of performance evaluation should be the improvement of instruction and the recognition of quality teaching.

Effective evaluation now exists in few school districts in this state. Ineffective procedures or, worse yet, no evaluation procedures at all are found in other districts. Because evaluation is an intrinsic component in the education process, it must be addressed. We are willing to work to this end.

But we do not agree that evaluation can replace tenure and the due process rights to which all teachers are entitled.

Signed by: Gordon Heaton, President, Colorado Education Association.

D. The report is very well written and contains many powerful, constructive recommendations; Duane Butcher is to be congratulated for his efforts. Unfortunately, it has the same weaknesses that so many of the other "crisis in education" reports have: it doesn't address the real problem. I believe the real problem is very well discussed in the John Goodman, **Wall Street Journal** article, that is: we are measuring our schools on the wrong thing (attendance) and that is exactly what we are getting. We must start measuring our schools on the quality of education delivered if we really expect dramatic improvement. We cannot keep dodging this bullet and hope to just band-aid the system into excellence. It will take a significant change in motivation to get the quantum leap that we all seek.

I also want to take this opportunity to stress that the shortage of top level, qualified math and science teachers is going to continue to get worse; and increasing salaries isn't going to dramatically turn that around. There are simply too many more attractive careers in the private sector for the bright and technically talented. Thus we must learn how to do a quality job of educating our young people with fewer qualified people. The solution is obvious -- use technology to leverage the few experts -- computer-aided, live video with 2-way audio is the practical answer. It works! Let's pioneer this in our public education system.

Signed by: Tom Burniece, Digital Equipment Corporation.

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